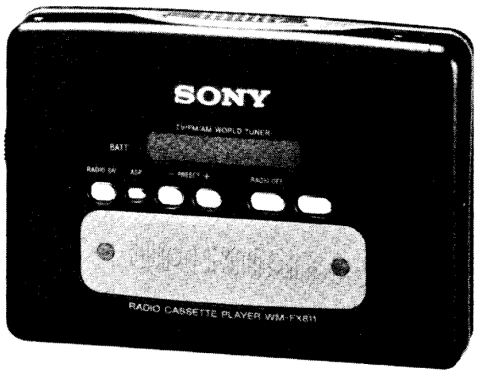
WM-FX811

SERVICE MANUAL

Ver 1.1 2002. 01

E Model
Australian Model
Tourist Model



Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MT-WMEX911-60

SPECIFICATIONS

Radio section

Frequency range
- FM (stereo) : 76.0 - 90 MHz (JE)
  87.5 - 108 MHz (E, AUS)
- AM (mono) : 531 - 1,710 kHz (JE)
  531 - 1,602 kHz (E, AUS)
- TV (mono) : 1 -12 ch (JE)

Antenna
- FM/TV : Ear receiver cord antenna
- AM : Built-in ferrite bar antenna

Tape player section and general

Frequency response
(DOLBY NR off)
30 - 18,000 Hz (EIAJ*)

Output
Earphones (∩/REMOTE jack)
load impedance 8 - 300 Ω

Power output
4 mW + 4 mW (EIAJ, 16 Ω)

Power requirements
1.5 V DC Rechargeable battery (NC-6WM)
One R6 (size AA) battery

Battery life (EIAJ)

Battery	Playback	Radio reception
Rechargeable NC-6WM fully charged	Approx. 5 hours	Approx. 7.5 hours
Sony alkaline AM3 (N)	Approx. 13 hours	Approx. 21 hours
Rechargeable NC-6WM with Sony AM3 (N)	Approx. 18 hours	Approx. 28.5 hours
Sony SUM-3 (NS)	Approx. 3.5 hours	Approx. 7 hours

For maximum performance we recommend the use of alkaline battery.

Dimensions
Approx. 108.4 x 77.2 x 21.5 mm (w/h/d)
incl. projecting parts and controls (EIAJ)

Mass
Main unit Approx. 155 g
For use Appox. 250 g (incl. Stereo earphone with remote controller, rechargeable battery NC-6WM, tape C-60HF)

Design and specifications subject to change without notice.

Using AC power

Remove the rechargeable battery if inserted and attach the battery case and connect the AC power adaptor (AC-E15L not supplied) to the DC IN 1.5V of the battery case and to the wall outlet. Do not use any other AC power adaptor.

Polarity of the plug

Dolby noise reduction manufactured under licence from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ◫ are trademarks of Dolby Laboratories Licensing Corporation.

*(EIAJ) Electric Industries Association of Japan

RADIO CASSETTE PLAYER

9-959-893-13
2002A1600-1
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Sony Corporation
Personal Audio Company
Published by Sony Engineering Corporation

SONY®

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SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

SECTION 1
SERVICING NOTE

Hall element H701 mounted on the main board is used to detect rotaion of the reels. Because it is mounted on the main board, when the main board is being removed, rotation of the reels cannot be detected and the auto-off/tape-end detector circuit does not operate correctly.
Switch S701 (for N/R and FF/REW) is also mounted on the main board. Therefore, without the audio board, the head cannnot be placed in playback position, and power cannot be supplied to the circuitry of the playback system.
When the audio board is being removed, follow the procedures below, in order to check operation of the mechanisms of the tape deck and to check voltages supplied to each circuit.

SETTING

1) Refer to "Disassembly" and remove the cabinet and open the AUDIO board.
2) Turn OFF the BL SKIP switch (S702) of the AUDIO board.
3) Supply 1.3V to the battery terminals (+) and (–) using a stabilized power supply.

Note 1 : Do not change the setting position of switch S701 when removing the audio board. If it has been changed accidentally, or if the desired mode cannot be set with the switch, adjust the setting again after the audio board is installed.

Note 2 : Use the remote control ◁▷, □, FF, and REW switches as much as possible. If the remote control is not available, do not touch S503 to S506 with the hand and use something with a round tip to press them.

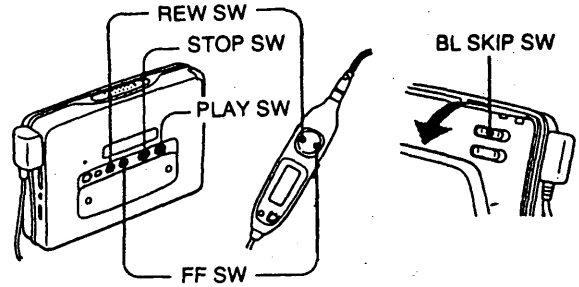
FF/REW mode

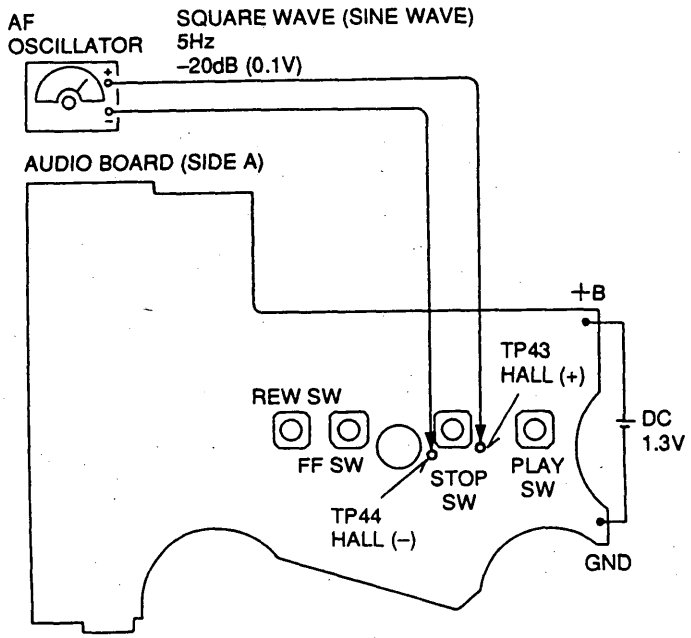
(1) Apply a square wave signal or a sine wave signal to hall element sensor H701. (See the right figure.)
(2) Slide the STOP switch for selecting STOP mode.
(3) Slide the FF or REW switch.
(4) Remove the audio board.

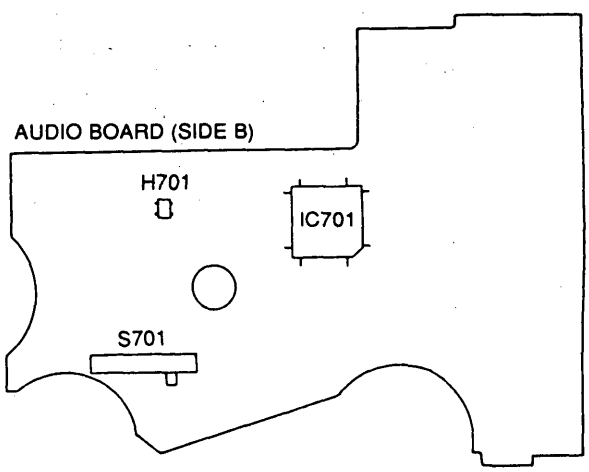
PLAY mode

(1) Apply a square wave signal or a sine wave signal to hall element sensor H701. (See the right figure.)
(2) Slide the STOP switch for selecting STOP mode.
(3) Slide the PLAY switch.
With the audio board installed, Slide the PLAY switch selects the FWD or REV mode alternatively.
(4) Remove the audio board.

FRONT CABINET

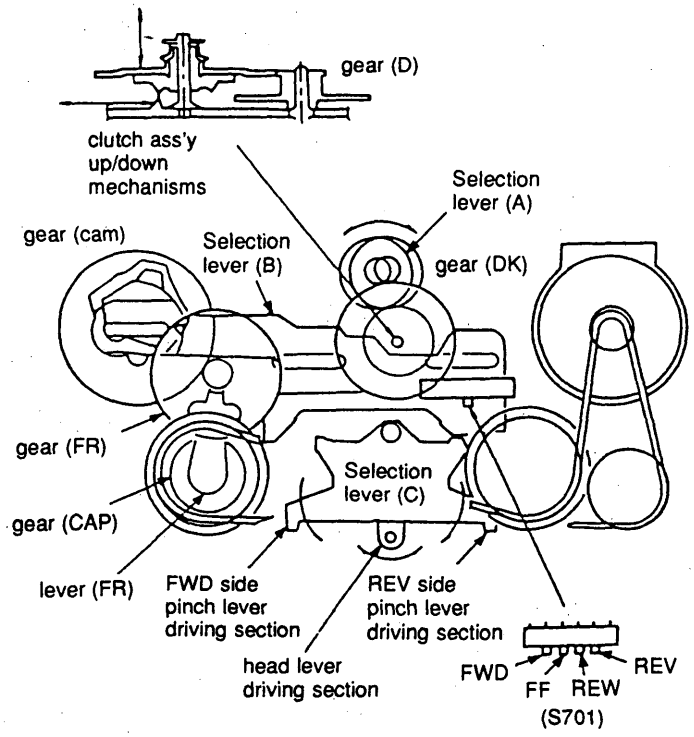






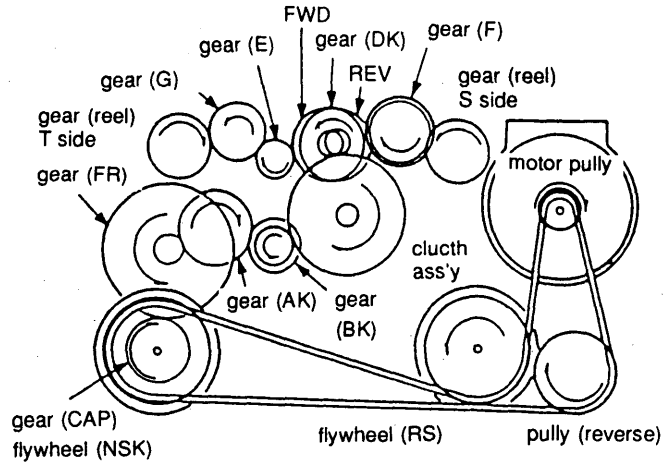
Function of the lever and rotating mechanisms for mode selection

- Mode selection starts when the motor rotates reversely.
- Selection lever (B) moves to the left or right when driver whin the gear (cam).
- The swich set position of switch S701 (4-position switch) is determined in accordance with the position of Selection lever (B). When the switch set position is set appropriately, the moter rotates normally and the tape starts moving.

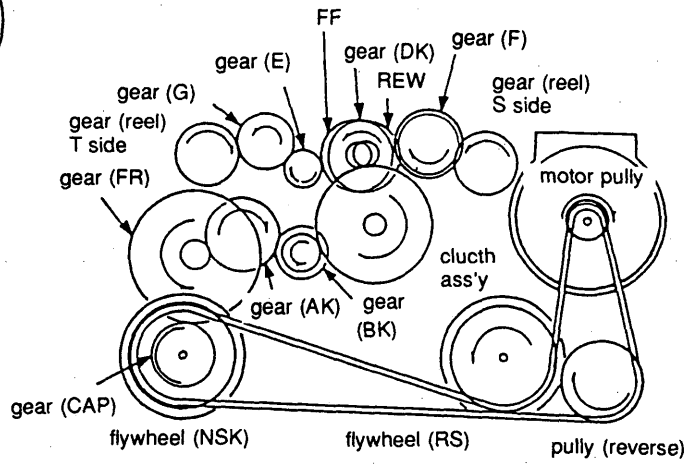


- Lever (FR) is driver with gear (FR) by friction, and it swings to the left or right depending on the rotating direction of the motor.
- Selection levers (A) and (C) also swing to the left or right in accordance with the movement of Selection lever (B), and the clutch assembly moves upward or downward accordingly.
- The pinch roller is activated and the head is placed in playback position with Selection lever (C).
- When the mode is switched from one mode to another, the pinch roller is activated while the motor is rotating reversely (for a short period of time), causing a little slackness in the tape transport.

1. Rotating Mechanisms in PLAY Mode



2. Rotating Mechanisms in FF, REW Mode

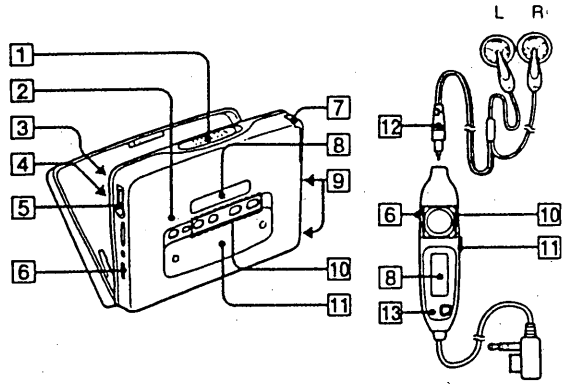


SECTION 2
GENERAL

This section is extracted from instruction manual.

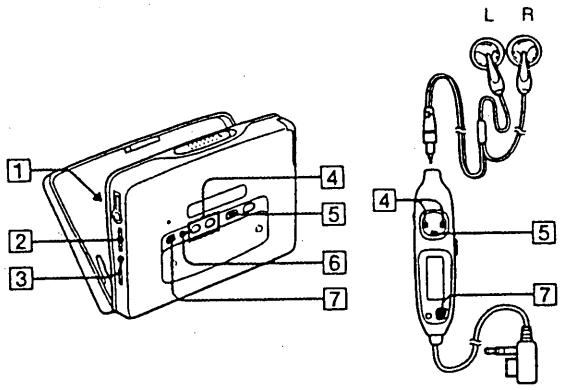
PARTS IDENTIFICATION

Tape Player and General section



1 OPEN switch
2 BATT (battery) indicator
3 MODE (tape transport mode)/BL SKIP (blank skip) switch
4 DOLBY NR (Dolby Noise Reduction) switch
5 ∩ REMOTE (earphone with remote control unit) jack
6 VOL (Volume) switch
7 Battery compartment lid (for the rechargeable battery)
8 Display window
9 Terminal for a dry battery case
10 Tape operation buttons
11 Main unit : Hold cover
Remote controller : HOLD switch
12 Micro plug
13 DBB (dynamic bass boost)/AVLS (Automatic Volume Limitter System) selector

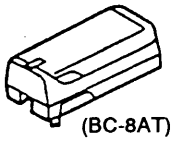
Radio section

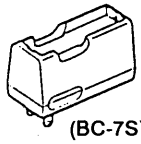


1 FM MONO ST switch
2 TUNE (tuning) +/– switch
3 ENTTER button
4 preset +, – button
5 ■ • RADIO OFF (stop/radio off) button
6 ASP (Automatic Station Preset) button
7 B (band select) • RADIO ON button

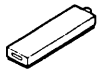
Accessories supplied

• Battery charger
(excluding Australian model)

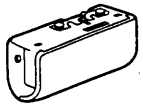

(BC-8AT)


(BC-7SY)

• Rechageable battery

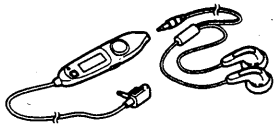


• Battery case



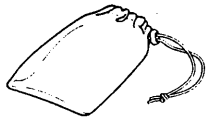
• Sony alkaline battery AM3 (N)
(For Tourist model only)

• Stereo earphone
(with Remote Controller)



• Ear adaptors(2)
(If the earphones do not fit your ears, attach the ear adaptors.)

• Carrying case



• Clip

• Plug adaptor (excluding Australian model)
• Instruction manual

What the ASP button does (ASP function)

This Walkman stores the main stations of nine areas of Japan (Sapporo, Sendai, North Kanto, South Kanto, Nagoya, Osaka, Hiroshima, and Fukuoka and Shinkansen). You can tune in the originally stored stations by simply pressing the ASP button. If you are out of the areas when you press the ASP button, the Walkman searches and stores receivable stations automatically.

If the ASP function does not store the desired station, or you want to customize the preset number of the stations, see *Tuning in the Radio Manually* or *Storing Radio Stations Manually and Receiving the Stations* as following.

Receiving Stations Outside Japan

1 Press and hold ENTER and press B•RADIO ON to turn on the radio. "AREA 1" flashes in the display window.
2 While "AREA 1" is flashing, press PRESET –/+ repeatedly to select either area "USA" (USA and Canada) or "Eur" (Europe and other countries) and then press ENTER.
3 Press ASP to store the radio stations (both AM and FM) automatically.
The Walkman starts searching and storing stations.
4 Press B•RADIO ON to select the desired band and press PRESET –/+ to select a station.

Storing Radio Stations Manually and Receiving the Stations (Manual-Memory function)

1 Tune in a station you wish to store.
2 Press ENTER inside the cassette holder. "PRESET" and a preset number flash in the display window.
3 While "PRESET" and the preset number are flashing, select a preset number on which you wish to store a station using PRESET –/+.
4 While "PRESET" and the preset number are flashing, press ENTER.
5 Tune in a station using PRESET –/+.

Notes

- If you cannot complete step 3 or 4 while the indications are flashing, repeat from step 2.
- If you preset automatically using ASP, the stations stored will be erased.

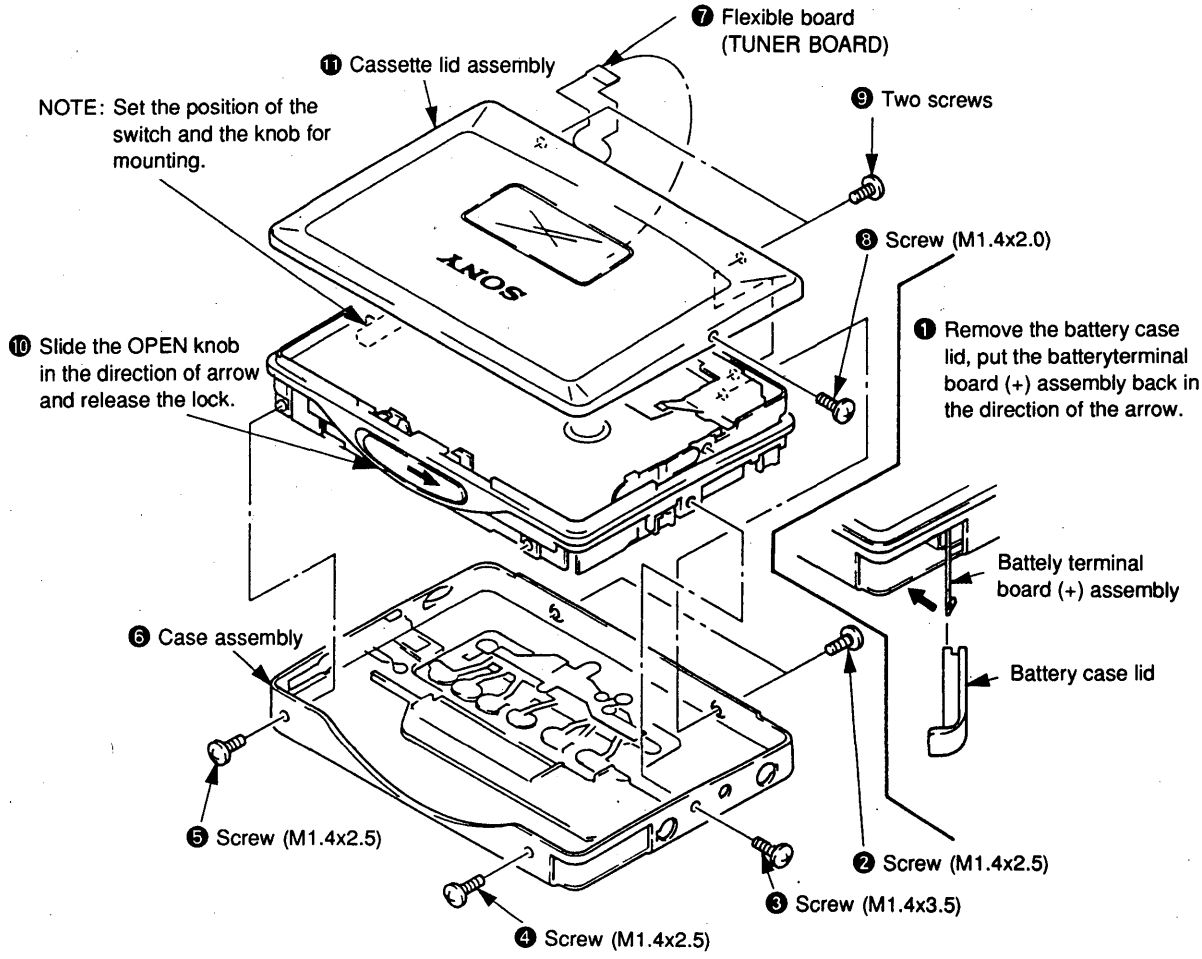
To cancel the stored station

Operate the unit according to the steps in *Storing Radio Stations Manually and Receiving the Stations* from step 1 to step 3. When you enter a preset number, select "–," and press ENTER while "–" is flashing.

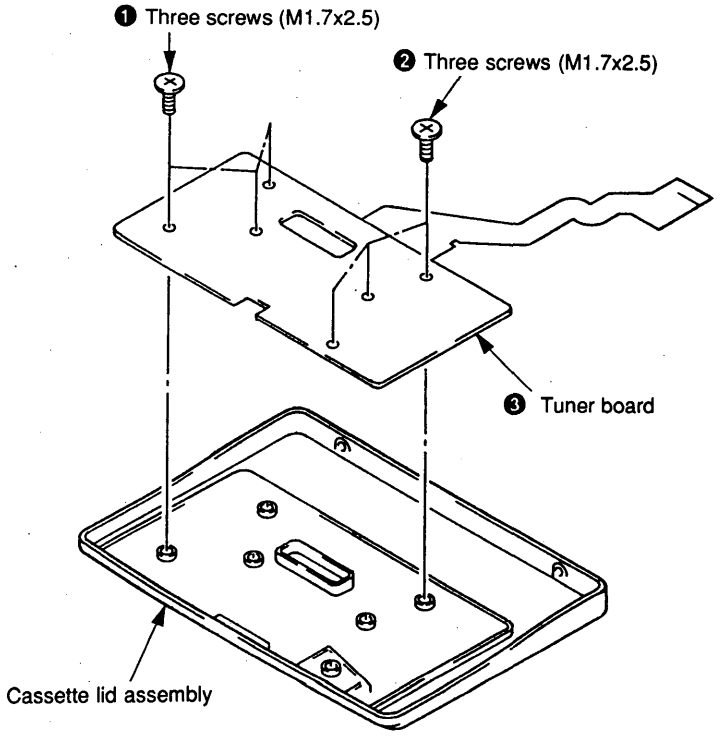
SECTION 3

DISASSEMBLY

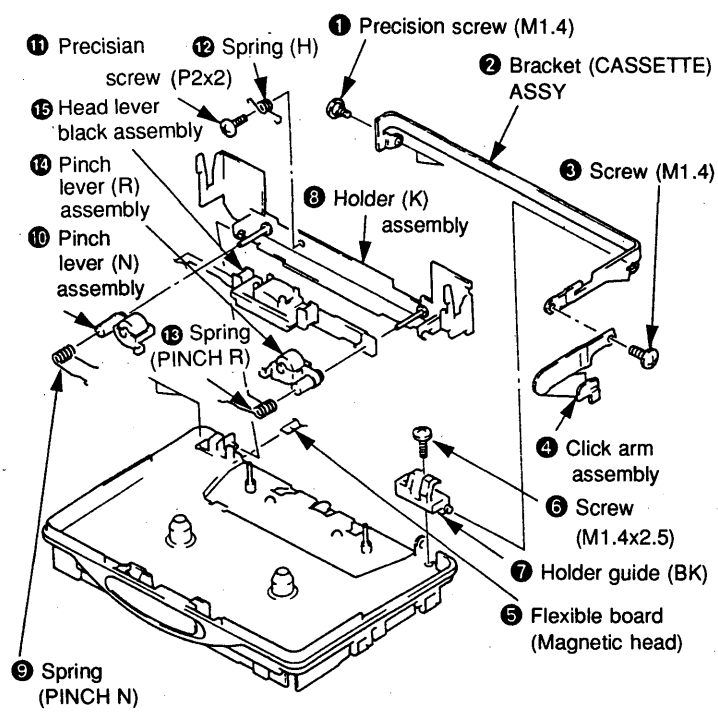
3-1. CASSETTE LID ASSEMBLY AND CASE ASSEMBLY


❼ Flexible board (TUNER BOARD)
⓫ Cassette lid assembly
NOTE: Set the position of the switch and the knob for mounting.
❾ Two screws
❽ Screw (M1.4x2.0)
❶ Remove the battery case lid, put the batteryterminal board (+) assembly back in the direction of the arrow.
⓾ Slide the OPEN knob in the direction of arrow and release the lock.
Battely terminal board (+) assembly
Battery case lid
❻ Case assembly
❺ Screw (M1.4x2.5)
❷ Screw (M1.4x2.5)
❸ Screw (M1.4x3.5)
❹ Screw (M1.4x2.5)

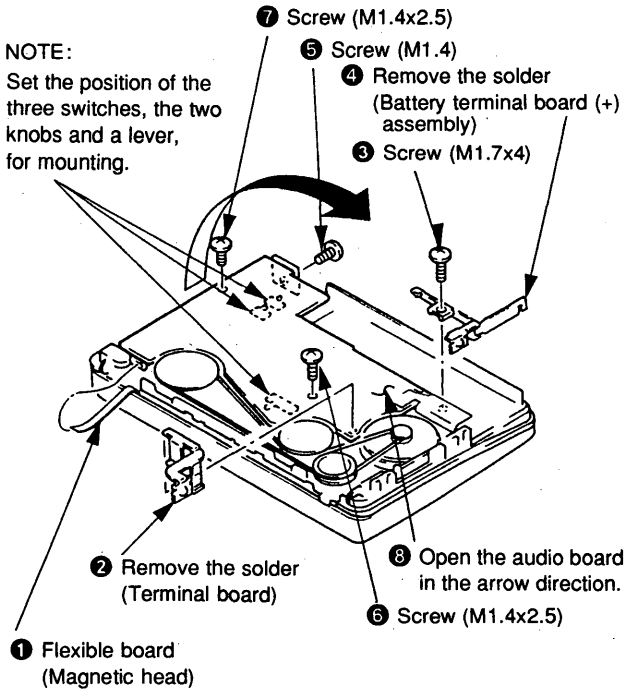
3-2. TUNER BOARD



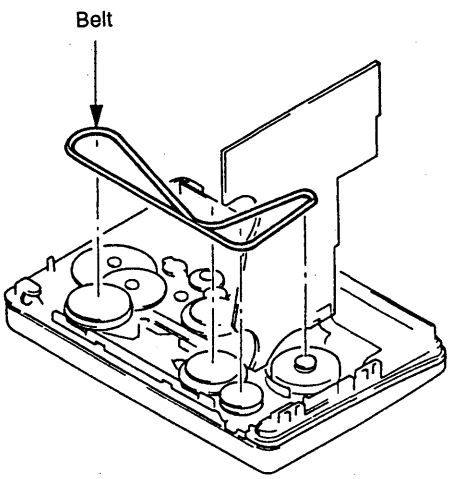
3-3. HOLDER ASSEMBLY


❶ Precision screw (M1.4)
⓫ Precisian screw (P2x2)
⓬ Spring (H)
❷ Bracket (CASSETTE) ASSY
⓯ Head lever black assembly
❸ Screw (M1.4)
⓮ Pinch lever (R) assembly
❽ Holder (K) assembly
⓾ Pinch lever (N) assembly
⓭ Spring (PINCH R)
❹ Click arm assembly
❻ Screw (M1.4x2.5)
❼ Holder guide (BK)
❺ Flexible board (Magnetic head)
❾ Spring (PINCH N)

3-4. OPENING OF AUDIO BOARD


NOTE:
Set the position of the three switches, the two knobs and a lever, for mounting.
❼ Screw (M1.4x2.5)
❺ Screw (M1.4)
❹ Remove the solder (Battery terminal board (+) assembly)
❸ Screw (M1.7x4)
❷ Remove the solder (Terminal board)
❽ Open the audio board in the arrow direction.
❻ Screw (M1.4x2.5)
❶ Flexible board (Magnetic head)

3-5. BELT



SECTION 4
ADJUSTMENTS

4-1. MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab :
   playback head　　rubber belts
   capstan　　idlers
   pinch roller
2. Demagnetize the playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage (1.3V) unless otherwise noted.

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	21 — 38 g • cm (0.29 — 0.53 oz • inch)
FWD Back Tension		0.5 — 3 g • cm (0.01 — 0.04 oz • inch)
REV	CQ-102RC	21 — 38 g • cm (0.29 — 0.53 oz • inch)
REV Back Tension		0.5 — 3 g • cm (0.01 — 0.04 oz • inch)
FF	CQ-201B	more than 60 g • cm (more than 0.84 oz • inch)
REW		

Tape Pulling Force Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-403A	more than 35 g (more than 1.23 oz)
REV	CQ-403R	

4-2. ELECTRICAL ADJUSTMENTS

TAPE SECTION

PRECAUTION

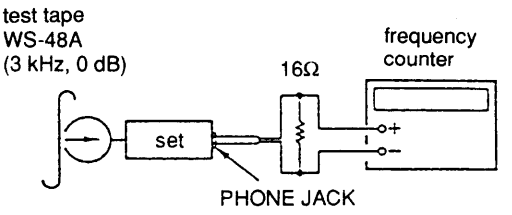
1. Power supply voltage : 1.3V.
2. Switch position
   DOLBY NR switch : OFF
   EX DBB switch : NORM

Test Tape

Type	Signal	Used for
WS-48A	3 kHz, 0 dB	Tape Speed Adjustment

TAPE SPEED ADJUSTMENT

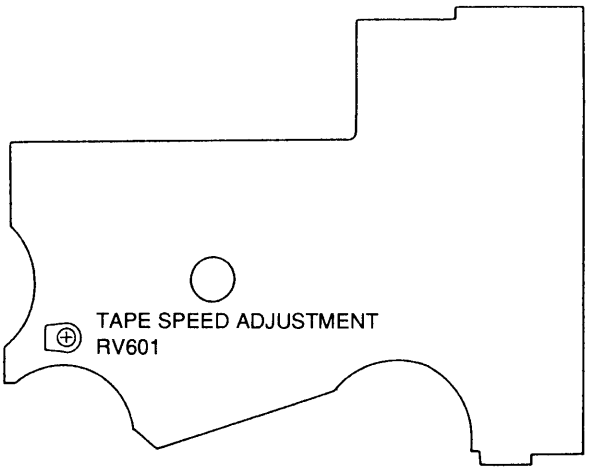
Procedure :



1. Play back WS-48A (tape center portion) in FWD mode. Adjust the RV601 so that the frequency counter reads 3,000 ± 30 Hz.
2. Play back WS-48A (tape center portion) in REV mode. Confirm that the reading of frequency counter is within 2.5% from the reading in step 1.

Adjustment Part Location Diagram :

[MAIN BOARD] (SIDE B)

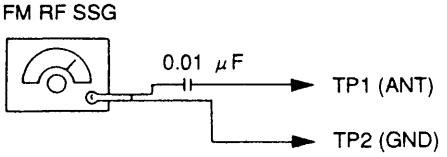


TUNER SECTION

FM SECTION

setting:

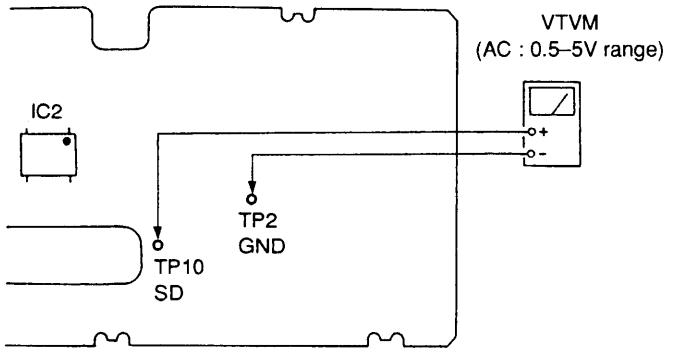
FUNCTION switch : RADIO
BAND switch : FM



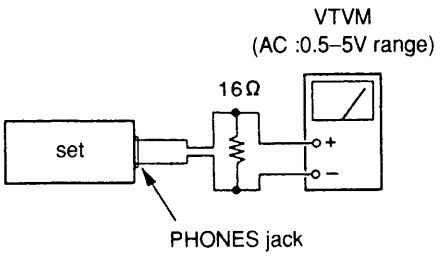
Modulation : 400 Hz, 22.5 kHz dev. (30%)
Output level : as low as possible.

FM DET ADJUSTMENT	
Adjust SD signal to LOW level on VTVM	
T4	78.030 MHz
	77.970 MHz

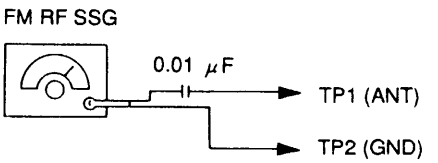
[TUNER BOARD]



FM IF ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
T1	76.00 MHz



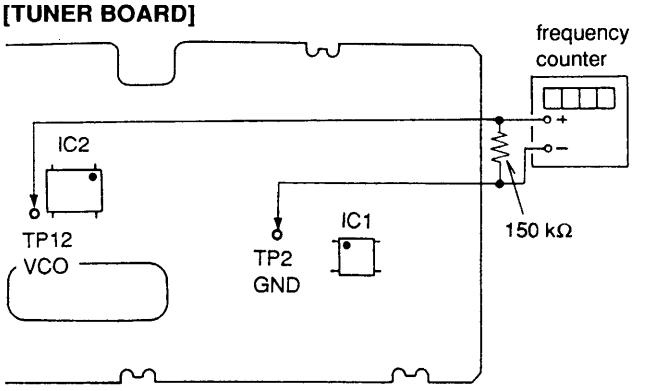
VCO ADJUSTMENT



Carrier frequency : 78.00 MHz
Modulation : no-modulation
Output level : 55 dB (562 μV)

Adjustment Element	Frequency Display	Frequency counter Reading
RV1	78.00 MHz	19.00 kHz ± 0.05 kHz

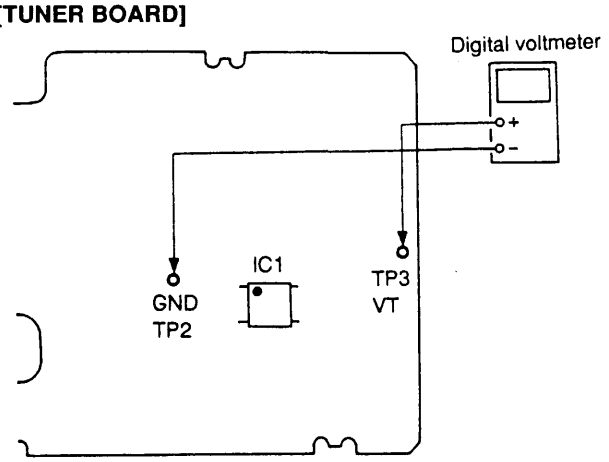
[TUNER BOARD]



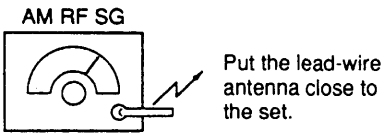
AM SECTION

setting :
FUNCTION switch : RADIO
BAND switch : AM

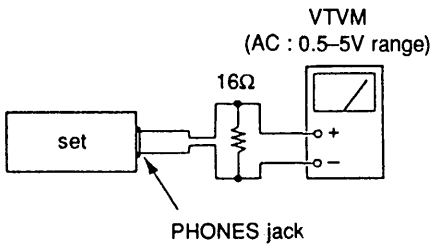
AM TUNING VOLTAGE ADJUSTMENT [TUNER BOARD]



AM IF ADJUSTMENT, AM TRACKING ADJUSTMENT



Modulation : 400 Hz, 30%
Output level : as low as possible.



- Repeat the procedures in each adjustment several times, and the tracking adjustment should be finally done by the trimmer capacitors.

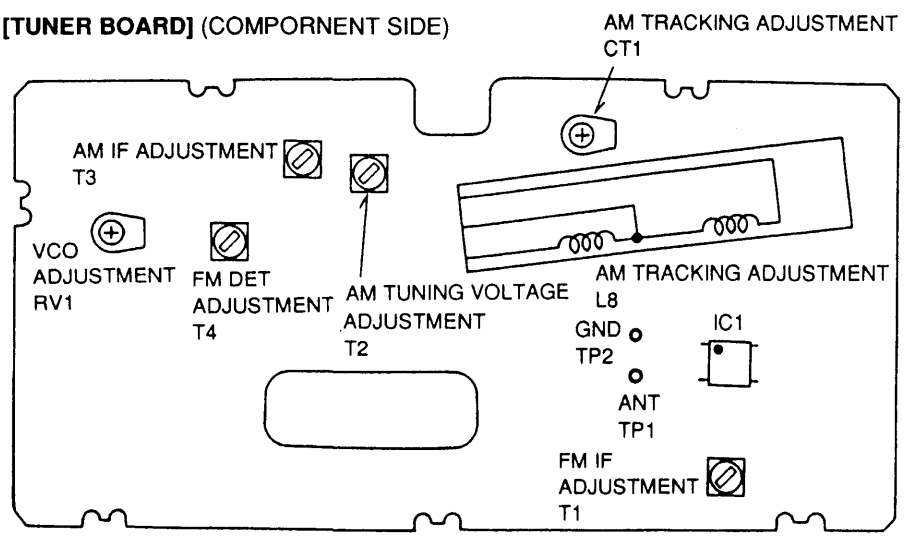
AM IF ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
T3	1404 kHz

AM TUNING VOLTAGE ADJUSTMENT	
Adjust for a 1.40 ± 0.03 Vdc reading on Digital voltmeter.	
T2	531 kHz

AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L8	603 kHz
CT1	1404 kHz

Adjustment Part Location Diagram :

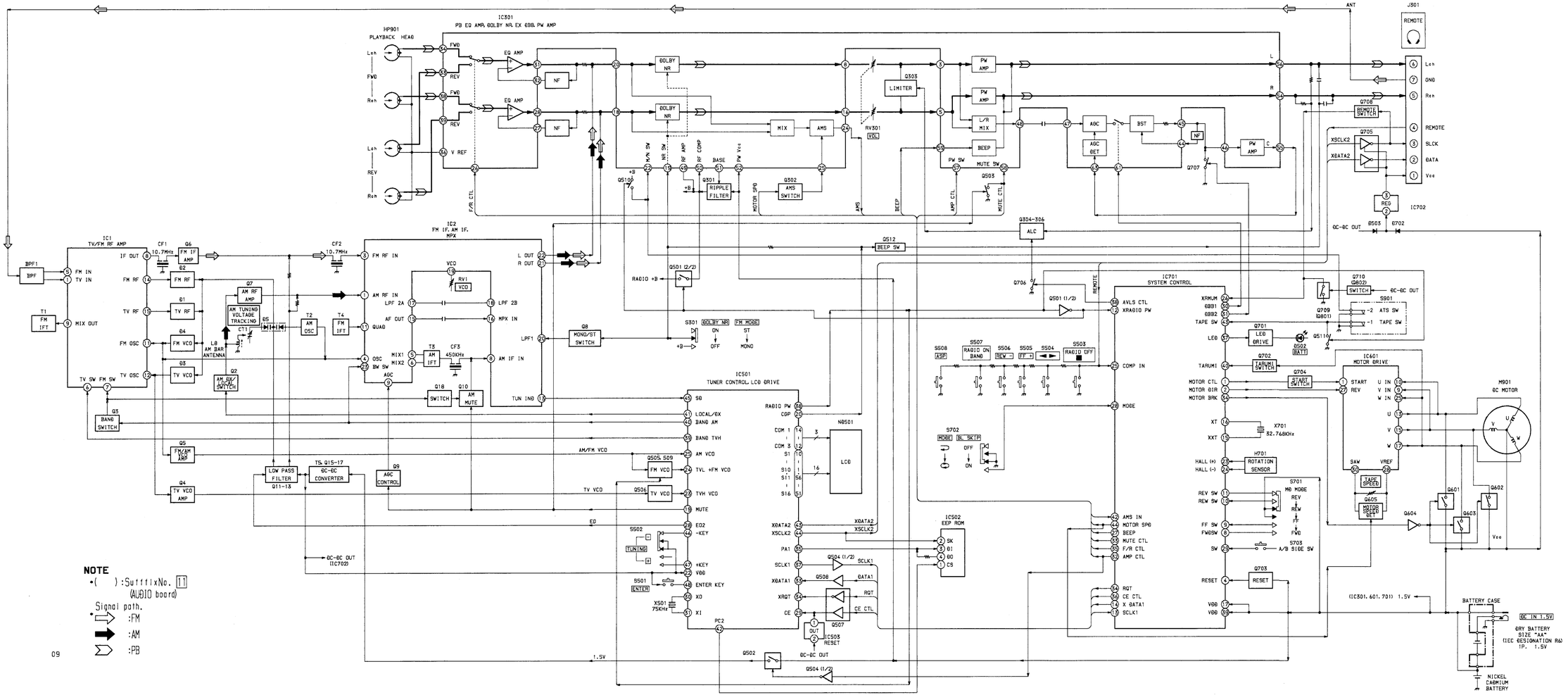
[TUNER BOARD] (COMPORNENT SIDE)



MEMO

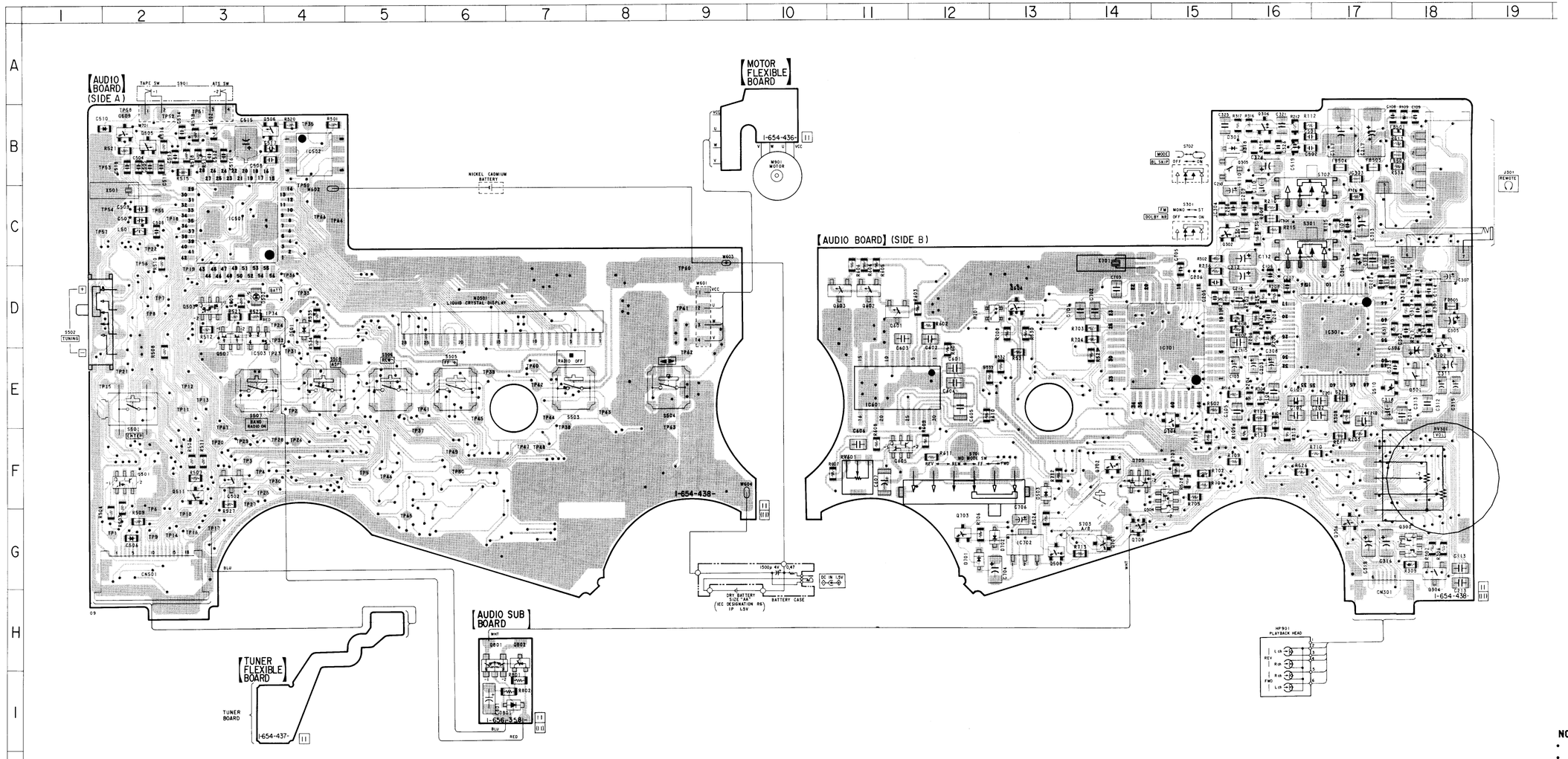
SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM



5-2. PRINTED WIRING BOARD — AUDIO SECTION — (AUDIO board SUFFIX No.11)

• See page 31 for Semiconductor Lead Layouts.



• Semiconductor Location

Ref. No.	Location
D301	B-16
D501	D-4
D502	D-4
D503	F-13
D701	G-12
D702	G-13
D801	I-7
H701	D-12
IC301	D-17
IC501	C-3
IC502	B-4
IC503	E-4
IC601	E-11
IC701	D-15
IC702	G-13
Q301	E-18
Q302	C-16
Q303	G-18
Q304	H-18
Q305	B-16
Q306	B-16
Q501	F-2
Q502	F-3
Q503	D-3
Q504	G-15
Q505	B-2
Q506	B-4
Q507	E-3
Q508	G-13
Q509	B-2
Q510	E-17
Q511	F-3
Q601	D-11
Q602	D-11
Q603	D-11
Q604	D-13
Q605	F-11
Q701	G-14
Q702	F-14
Q703	G-12
Q704	F-15
Q705	F-14
Q706	G-17
Q707	E-18
Q708	G-14
Q801	H-6
Q802	H-7

NOTE

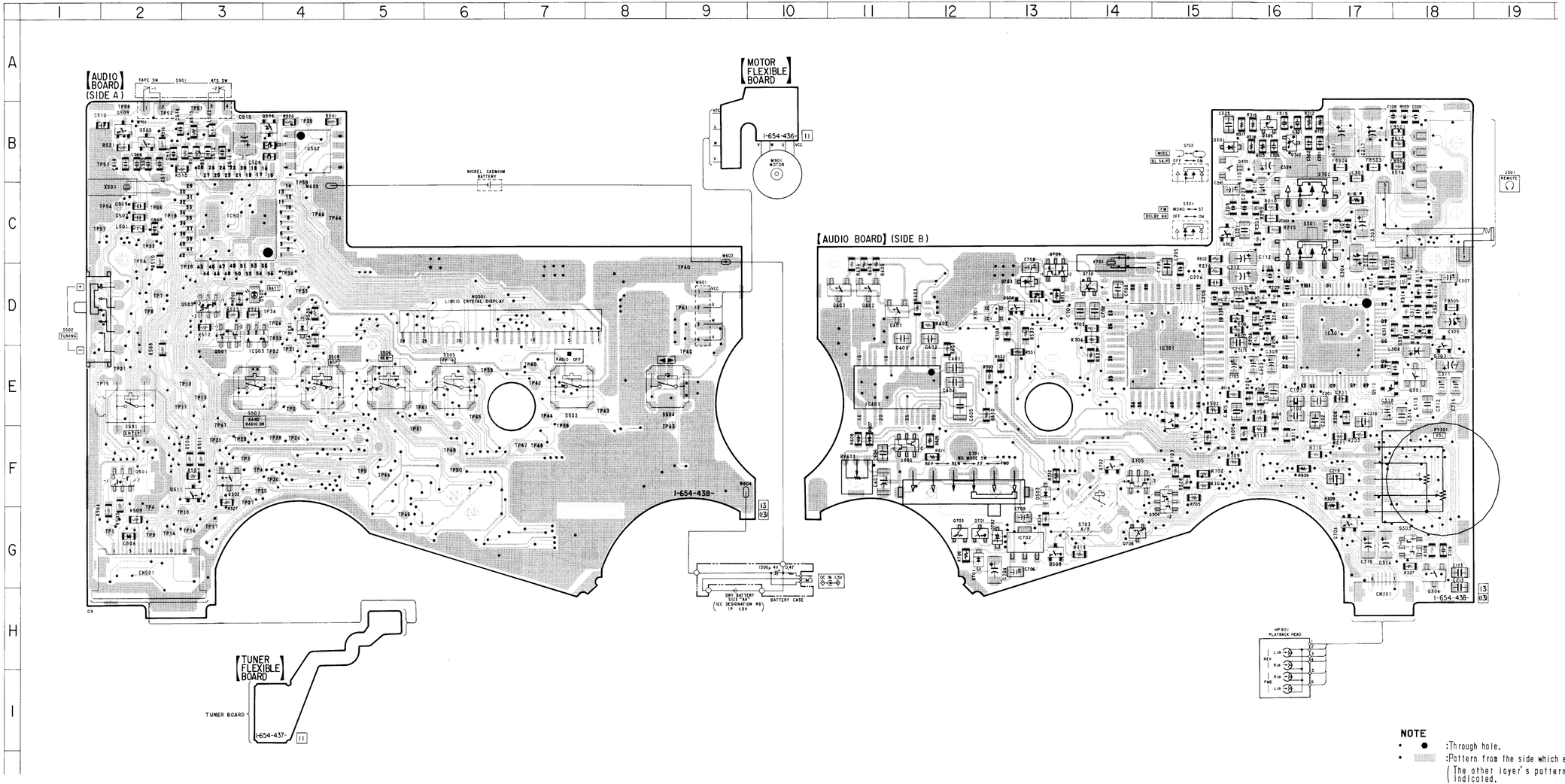
- ● :Through hole.
- ▒ :Pattern from the side which enable seeing. (The other layer's patterns are not indicated.

5-3. PRINTED WIRING BOARD — AUDIO SECTION — (AUDIO board SUFFIX No.13)

• See page 31 for Semiconductor Lead Layouts.

• **Semiconductor Location**

Ref. No.	Location
D301	B-16
D501	D-4
D502	D-4
D503	F-13
D701	G-12
D702	G-13
D703	D-13
H701	D-12
IC301	D-17
IC501	C-3
IC502	B-4
IC503	E-4
IC601	E-11
IC701	D-15
IC702	G-13
Q301	E-18
Q302	C-16
Q303	G-18
Q304	H-18
Q305	B-16
Q306	B-16
Q501	F-2
Q502	F-3
Q503	D-3
Q504	G-15
Q505	B-2
Q506	B-4
Q507	E-3
Q508	G-13
Q509	B-2
Q510	E-17
Q511	F-3
Q512	B-16
Q601	D-11
Q602	D-11
Q603	D-11
Q604	D-13
Q605	F-11
Q701	G-12
Q702	F-14
Q703	G-12
Q704	F-15
Q705	F-14
Q706	G-17
Q707	E-18
Q708	G-14
Q709	D-13
Q710	D-14



NOTE

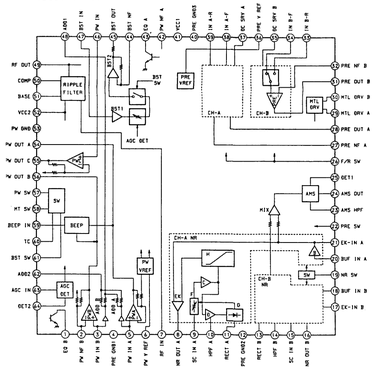
- ● :Through hole.
- ▒ :Pattern from the side which enable seeing. (The other layer's patterns are not indicated.)

5-4. SCHEMATIC DIAGRAM — AUDIO SECTION —

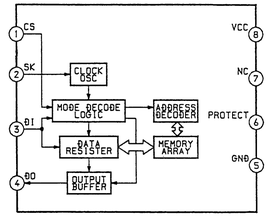
• See page 32 for IC Pin Functions. (IC501, 701)

• IC Block Diagrams

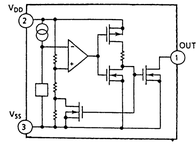
IC301 TA2084F

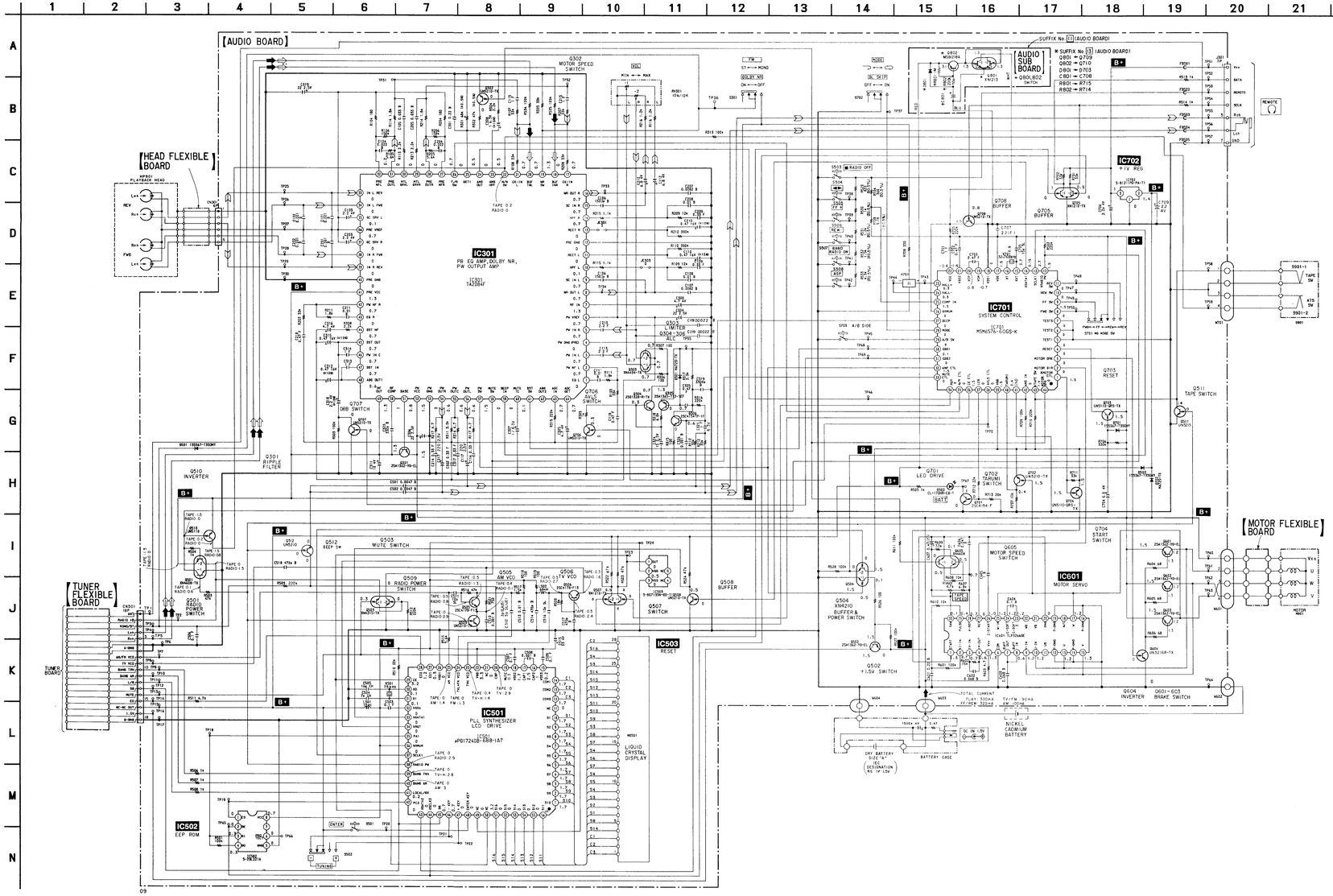


IC502 S-29L221ADFE-TB



IC503 S-80719SN-DG-T1





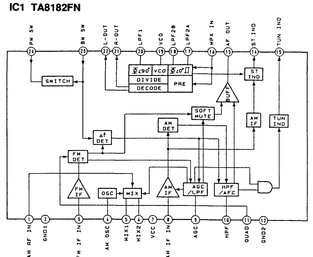
NOTE

- All capacitors are in μF unless otherwise noted. pF: μμF
  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- % :indicates tolerance.
- ▭ :panel designation.
- B+ :B+ Line.
- ▭ :adjustment for repair.
- Power voltage is dc 1.3 V and fed with regulated dc power supply from battery terminal.
- Total current is measured with no cassette installed.
- Voltages are dc with respect to ground under no-signal conditions.
  no mark: PLAY mode
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ :FM
  ➡ :AM
  ⇨ :PB
- Abbreviation
  AUS: Australian model.
  JE : Tourist model.

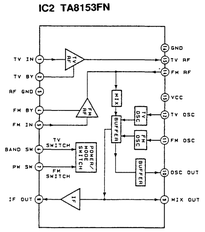
5-5. SCHEMATIC DIAGRAM — TUNER SECTION —

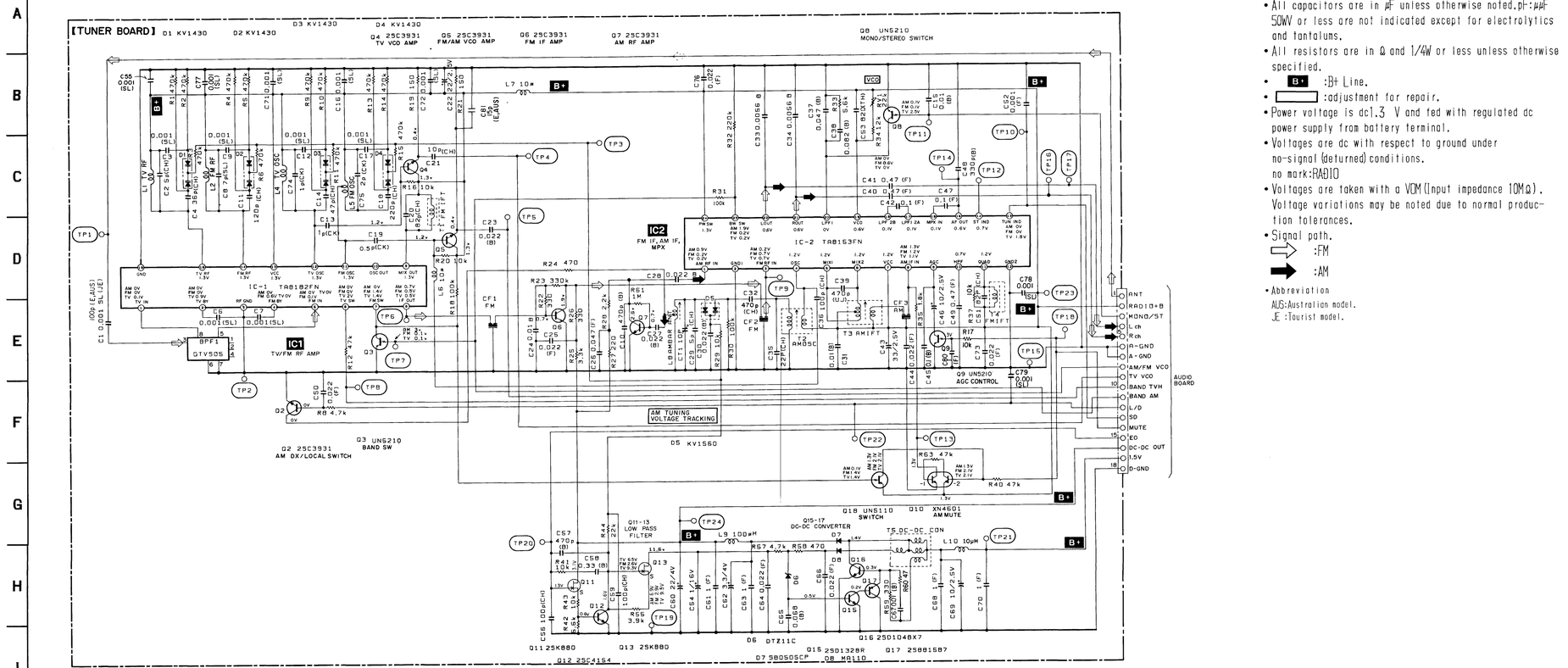
• IC Block Diagrams

IC1 TA8182FN



IC2 TA8153FN

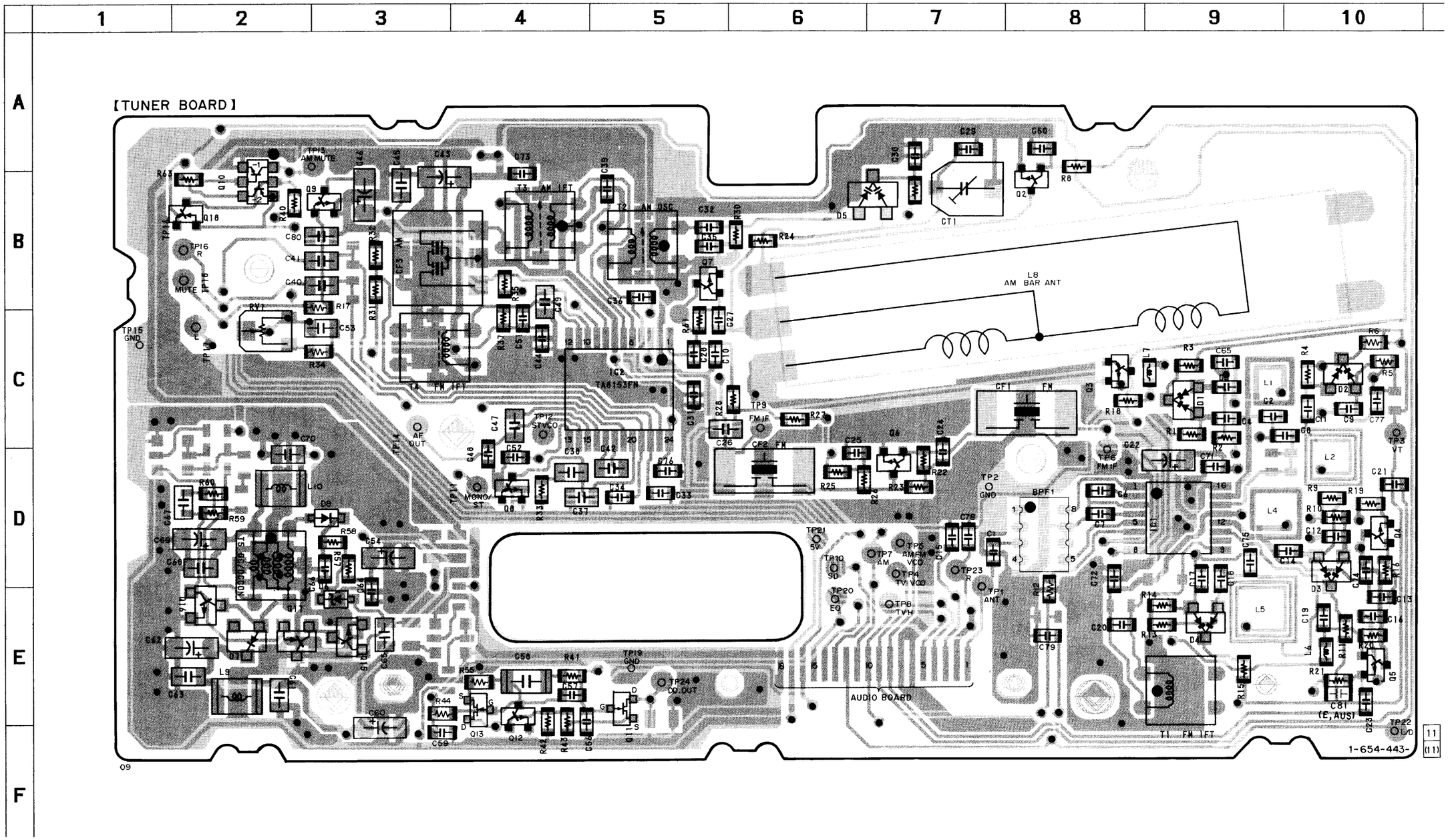




NOTE

- All capacitors are in μF unless otherwise noted. pF: μμF
  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- B+ :B+ Line.
- :adjustment for repair.
- Power voltage is dc1.3 V and fed with regulated dc power supply from battery terminal.
- Voltages are dc with respect to ground under no-signal (deturned) conditions.
  no mark:RADIO
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  :FM
  :AM
- Abbreviation
  AUS:Australian model.
  JE :Tourist model.

5-6. PRINTED WIRING BOARD — TUNER SECTION —



• Semiconductor Location

Ref. No.	Location
D1	C-9
D2	C-10
D3	D-10
D4	E-9
D5	B-7
D6	E-3
D7	E-2
D8	D-3
IC1	D-9
IC2	C-5
Q2	B-8
Q3	C-8
Q4	D-4
Q5	E-10
Q6	C-7
Q7	B-5
Q8	D-4
Q9	B-3
Q10	B-2
Q11	E-5
Q12	E-4
Q13	E-4
Q15	E-3
Q16	E-2
Q17	E-2
Q18	B-2

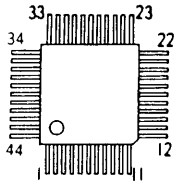
NOTE

• : Pattern from the side which enable seeing. (The other layer's patterns are not indicated.)

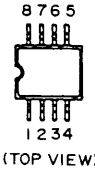
• Abbreviation
AUS: Australian model.

5-7. SEMICONDUCTOR LEAD LAYOUTS

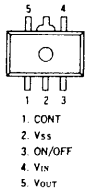
MSM6576-60GS-K



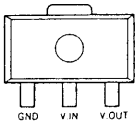
S-29L221ADFE-TB



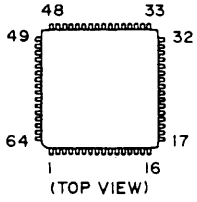
S-80719SN-DG



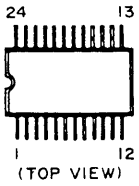
S-81211PG-PA-T1



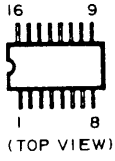
TA2084F



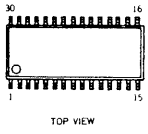
TA8153FN



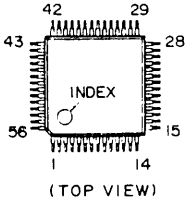
TA8182FN



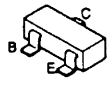
TLP326ADB



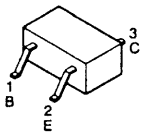
μPD1724GB-688-1A7



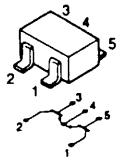
DTC144TU
UN5210
UN5210-R
UN5215
UN5216R
2SA1362YG
2SA1365-T12-1EF
2SB815B7-TA
2SC3931C
2SC4154-F
2SC4178
2SD1048-X7
2SD1328-T



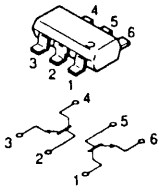
UN5110-QRS



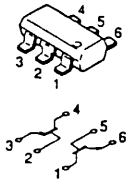
XN1210-TX



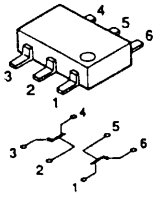
XN4210



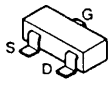
XN4315
XN4601
XN4608



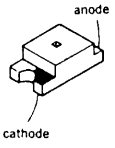
XN4404



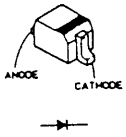
2SK880GR-TE85L



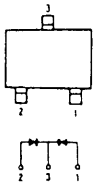
CL-170HR-CD-T



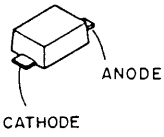
DTZ11B
DTZ11C
MA110



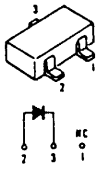
KV1430-TL
KV1560



MA729
1SS367-T3 SONY



SB05-05CP



5-8. IC PIN FUNCTIONS

- **IC501 TUNER CONTROLLER/LCD DRIVE (μPD1724GB)**

Pin No.	Pin Name	I/O	Function
1 to 10	S10 to S1	O	LCD segment signal output pin
11	NC	–	Not used
12 to 14	COM3 to COM1	O	LCD common signal output pin
15	VSS3	–	Pins connecting capacitors for doubler circuits generating the LCD drive voltage
16	CAP2	–	
17	CAP1	–	
18	VSS2	–	
19	MUTE	O	Generates 1.12 kHz pulses when using as a VDP
20	CGP	O	BEEP signal output terminal
21	NC	–	Not used
22	VDD	–	The internal reset circuit functions when supplied with 0V to 1.5V
23	TVH VCO	I	Partial oscillation frequency input pin (direct dividing method) (HIGH IMP when CE is low)
24	TVL+FM VCO	I	Partial oscillation frequency input pin (pulse swallow method) (PULL DOWN when CE is low)
25	AM VCO	I	
26	VSS1	–	GND
27	E01	O	Not used
28	E02	O	When the frequency obtained by frequency dividing the partial oscillation frequency is higher than the reference frequency: HIGH output. When Lower: LOW output. When the same: HIGH-IMP.
29	CE	I	The internal reset circuit functions when LOW becomes HIGH
30	XO	O	Connected to the liquid crystal oscillator Oscillates 75 kHz liquid crystals
31	XI	I	
32	VSS4	–	Connected to the regulator circuit capacitor
33	XDATA1	I	Data from the main microprocessor
34	XRQT	I	Pin inputting requests from the main microprocessor
35	PA1	I/O	Pin for communicating data with EEPROM
36	XRMUM	I	With remote control: HIGH potential. No remote control: LOW potential
37	XSCLK1	O	Serial clock output pin for communicating with the main microprocessor
38	RADIO POWER	O	HIGH potential when RADIO is ON
39	BAND TVH	O	Become HIGH potential when TV channels 4 to 12 are received
40	BAND AM	O	Outputs HIGH potential only during AM reception
41	LOCAL/DX	O	LOCAL: HIGH output. DX: LOW output.
42	PC2	O	CS control pin for the EEPROM
43	XDATA2	O	Remote control data output pin
44	XSCLK2	O	Remote control EEPROM serial clocks
45	SD	I	No broadcasting station: HIGH output. With: LOW output
46	– KEY	I	Manual reception frequency down button
47	+ KEY	I	Manual reception frequency up button
48	ENTER KEY	I	Used for manual preset, etc.
49, 50	NC	–	Not used
51 to 56	S16 to S11	O	LCD segment signal output pin

- **IC701 SYSTEM CONTROL IC (MSM6576)**

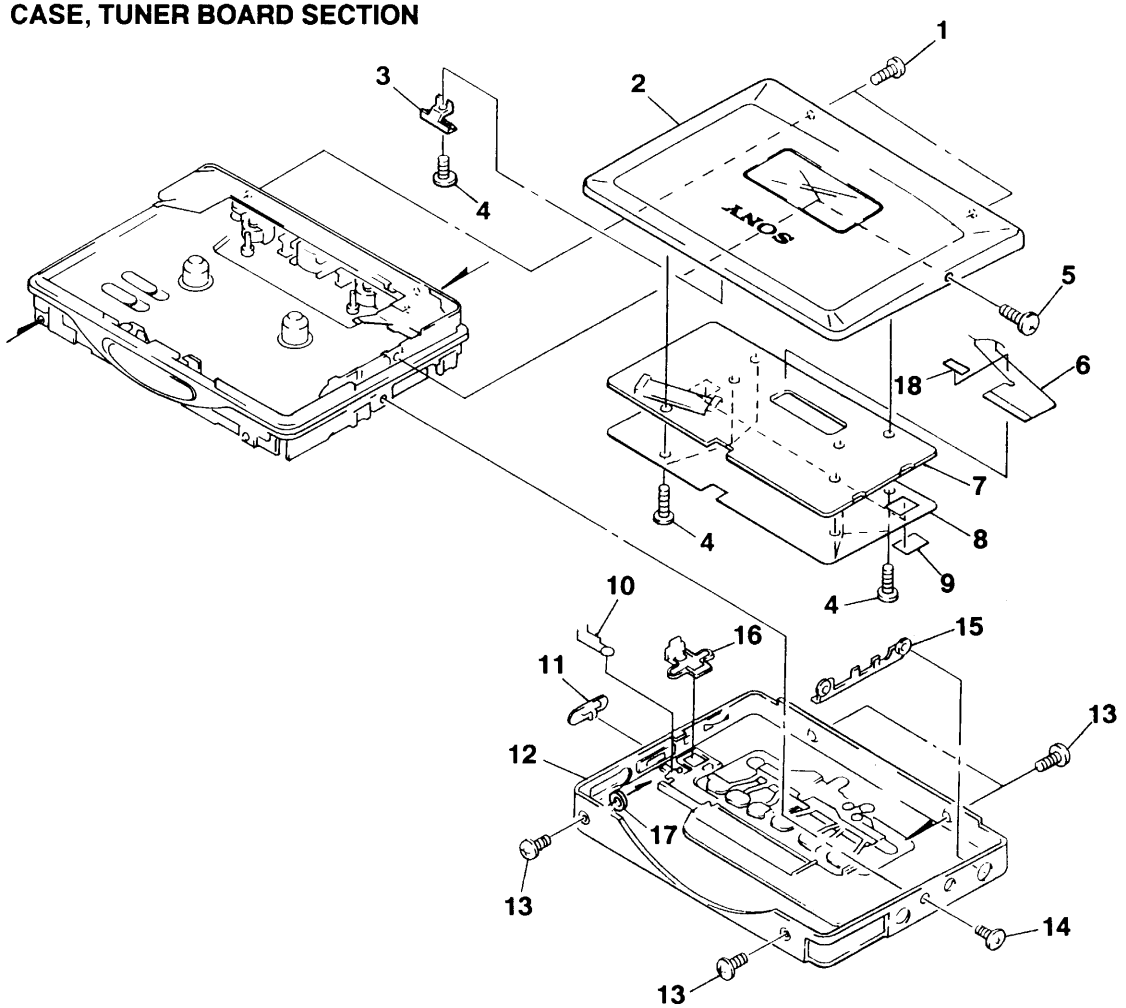
Pin No.	Pin Name	I/O	INT	ACT	Function
1	XMOTOR CTL	O	L	H	Motor control output pin. "H"=MOTOR ON.
2	MOTOR DIR	O	L	H	Motor rotating direction control. "L"=Forward direction, "H"=Reverse direction.
3	MOTOR BRK	O	L	H	Motor brake control. "H"=BRAKE ON.
4	RESET	–	–	H	Reset pin. "H"=RESET.
5	TEST1	–	–	–	Test pin (Fixed at "L")
6	TEST2	–	–	–	Test pin (Fixed at "L")
7	TEST3	–	–	–	Test pin (Fixed at "L")
8	FWD SW	I	–	–	MD condition check. "H"=FWD SW ON.
9	FF. SW	I	–	–	MD condition check. "H"=FF SW ON.
10	REW. SW	I	–	–	MD condition check. "H"=REW SW ON.
11	REV SW	I	–	–	MD condition check. "H"=REV SW ON.
12	XRADIO PW	I	–	–	For RADIO ON check TC-CF discrimination. L: RADIO ON
13	SCLK 1	I	–	–	Communication serial clock.
14	XDATA 1	O	L	–	Communication pin (For data output)
15	XXT	–	–	–	Connected to crystal oscillator. (32.768 kHz)
16	XT	–	–	–	Connected to crystal oscillator. (32.768 kHz)
17	VDD	–	–	–	1.5V power supply
18	VSS1	–	–	–	GND
19	VCM	–	–	–	Boosts power supply voltage.
20	VCP	–	–	–	Boosts power supply voltage.
21	VSS2	–	–	–	Boosts power supply voltage.
22	VEE	–	–	–	Boosts power supply voltage.
23	HALL +	I	–	–	Connected to hole element detected by rotation.
24	HALL –	I	–	–	Connected to hole element detected by rotation.
25	COMP IN	I	–	–	Operation button signal input pin.
26	XRMUM	I	–	–	For checking with/without remote control. H:With remote control.
27	BEEP	O	–	–	BEEP signal output pin.
28	MODE	I	–	–	"H"=SHUT OFF MODE, "L"=ENDLESS MODE (BL. SKIP ON)
29	A/B SW	–	–	–	"H"=MD FWD on A side, "L"=MD FWD on B side.
30	DBB 1	O	L	H	Tone control output. ROAM : "L", MID : "H", MAX : "H"
31	DBB 2	O	L	H	Tone control output. ROAM : "L", MID : "H", MAX : "L"
32	AMP CTL	O	L	H	Booster and amplifier power supply control. "H"=AMP ON.
33	MUTE CTL	O	L	H	Muting control. "L"=MUTE ON.
34	RQT	O	L	H	Communication requests to DIS microprocessor. H: REQUEAT ON
35	N/R CTL	O	L	H	HEAD input selection output. "H": FWD. "L": REV
36	CE CTL	O	L	H	DTS ENABLE. H: Display OFF (100 ms)
37	LED	O	L	H	LED ON/OFF. H: Lit (Normal rotation and RADIO) LOW BATT: OFF
38	AVLS CTL	O	H	–	AVLS control output. "L": ON
39	VDD	–	–	–	1.5V power supply
40	TARUMI	I	–	–	Reversible motive motor input terminal for loosening process. "L"=STOP
41	TC/CF	I	–	–	Initializing micro computer. "H"=TC, "L"=CF (Fixed at "L")
42	AMS IN	I	–	–	With/No sound input pin. "H"=With sound.
43	XTAPE SW	I	–	–	TAPE presence/absence detection input. L: TAPE is present
44	MOTOR SPD	O	L	H	Motor rotation speed control output. "L"=Normal.

SECTION 6
EXPLODED VIEWS

NOTE:

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Color Indication of Appearance Parts Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts color Cabinet's color
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories and packing materials are given in the last of this parts list.
- Abbreviation
  AUS : Australian model
  JE : Tourist model

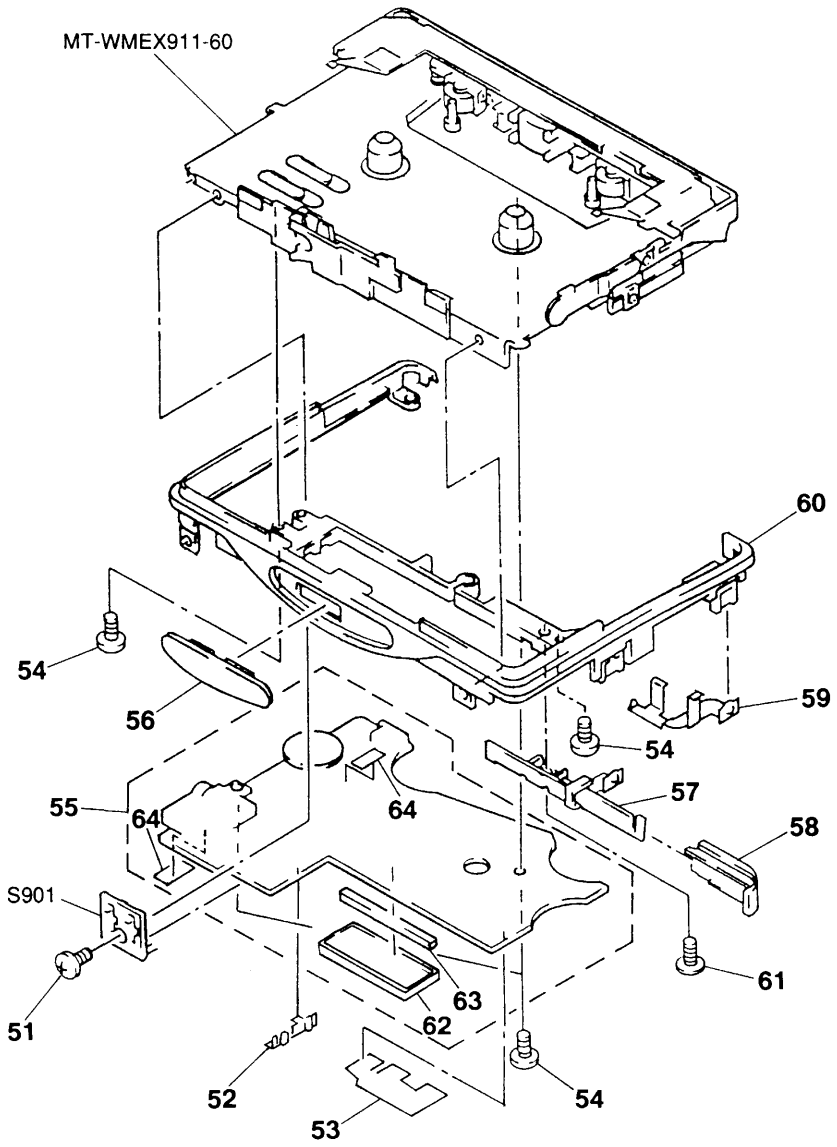
6-1. CASE, TUNER BOARD SECTION



Ref. No.	Part No.	Description	Remark
1	3-349-825-51	SCREW (SILVER)···(BLUE, SILVER)	
1	3-906-045-11	SCREW (BLACK)···(BLACK)	
2	X-3369-369-1	LID ASSY (B), CASSETTE (BLACK)···(BLACK)	
2	X-3369-599-1	LID ASSY (L), CASSETTE (BLUE)···(BLUE)	
2	X-3369-600-1	LID ASSY (S), CASSETTE (SILVER)···(SILVER)	
3	3-918-869-01	LOCKER (CF), OPEN	
4	3-375-114-21	SCREW (M1.7X2.5)	
5	3-704-197-11	SCREW (M1.4X2.0), LOCKING (SILVER)···(SILVER)	
5	3-704-197-13	SCREW (M1.4X2.0), LOCKING (BLACK)···(BLACK, BLUE)	
6	1-654-437-11	FLEXIBLE BOARD, TUNER	
7	A-3016-631-A	TUNER BOARD, COMPLETE (JE)	
7	A-3061-154-A	TUNER BOARD, COMPLETE (E, AUS)	
* 8	3-918-873-01	COVER, TU (JE)	
* 8	3-924-915-01	COVER, TU (E, AUS)	
9	3-923-069-01	CUSHION (E, AUS)	
10	3-918-876-01	SPRING (+, -)	
11	3-918-874-01	KNOB (+, -)(BLACK)···(BLACK)	

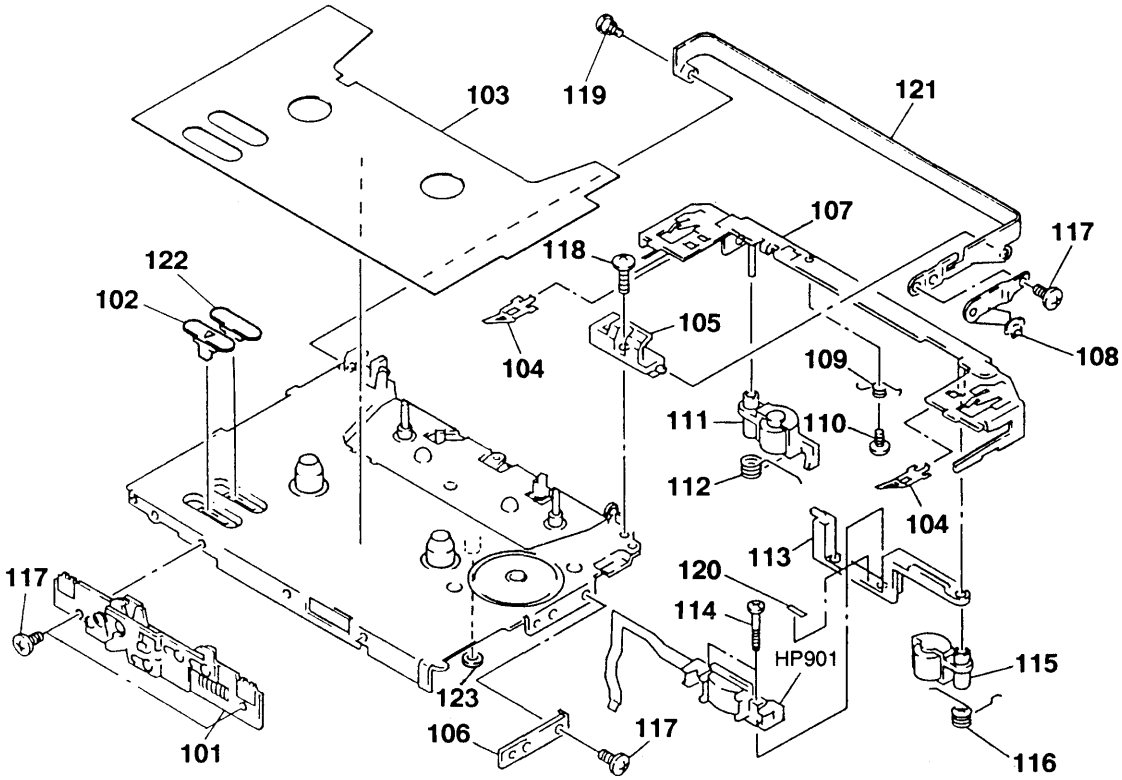
Ref. No.	Part No.	Description	Remark
11	3-918-874-11	KNOB (+, -)(GRAY)···(BLUE)	
11	3-918-874-21	KNOB (+, -)(LIGHT GRAY)···(SILVER)	
12	X-3369-370-1	CASE ASSY (B)(BLACK)···(BLACK)	
12	X-3369-601-1	CASE ASSY (L)(BLUE)···(BLUE)	
12	X-3369-602-1	CASE ASSY (S)(SILVER)···(SILVER)	
13	3-704-197-23	SCREW (M1.4X2.5), LOCKING (BLACK)···(BLACK, BLUE)	
13	3-704-197-21	SCRWE (M1.4X2.5) LOCKING (SILVER)···(SILVER)	
14	3-704-197-51	SCREW (M1.4X3.5), LOCKING (SILVER)···(SILVER)	
14	3-704-197-53	SCREW (M1.4X3.5), LOCKING (BLACK)···(BLACK, BLUE)	
15	3-905-328-01	PLATE, ORNAMENTAL	
16	3-918-875-01	BUTTON (ENTER)(BLACK)···(BLACK)	
16	3-918-875-11	BUTTON (ENTER)(GRAY)···(BLUE)	
16	3-918-875-21	BUTTON (ENTER)(LIGHT GRAY)···(SILVER)	
17	3-923-185-01	WASHER	
* 18	3-347-783-21	SHEET (SW)	

6-2. AUDIO BOARD SECTION



Ref. No.	Part No.	Description	Remark
51	3-366-892-01	SCREW (M1.4)	
52	3-918-897-01	TERMINAL BOARD (-), BATTERY	
53	1-654-436-11	MOTOR FLEXIBLE BOARD	
54	3-704-197-21	SCREW (M1.4X2.5), LOCKING	
55	A-3016-628-A	AUDIO BOARD, COMPLETE (JE)	
55	A-3016-714-A	AUDIO BOARD, COMPLETE (E, AUS)	
56	3-918-864-01	KNOB (OPEN) (JE) (SILVER)···(BLACK, BLUE)	
56	3-918-864-11	KNOB (OPEN) (JE) (GOLD)···(SILVER)	
56	X-3370-464-1	KNOB (OPEN) ASSY (E, AUS)	
57	X-3369-378-1	TERMINAL BOARD (+) ASSY, BATTERY	
58	3-918-846-01	LID, BATTERY CASE (BLACK)···(BLACK)	
58	3-918-846-11	LID, BATTERY CASE (BLUE)···(BLUE)	
58	3-918-846-21	LID, BATTERY CASE (SILVER)···(SILVER)	
59	3-918-898-01	TERMINAL BOARD	
60	3-918-863-01	ORNAMENT, REEL (JE) (SILVER)···(BLACK, BLUE)	
60	3-918-863-11	ORNAMENT, REEL (JE) (GOLD)···(SILVER)	
60	3-923-117-01	ORNAMENT, REEL (E, AUS)	
61	3-375-114-01	SCREW (M1.7X4)	
* 62	3-918-865-01	HOLDER, LCD	
63	1-537-585-11	CONDUCTIVE BOARD, CONNECTION	
64	3-841-069-02	SPACER	
S901	1-762-187-11	SWITCH, LEAF (TAPE/ATS)	

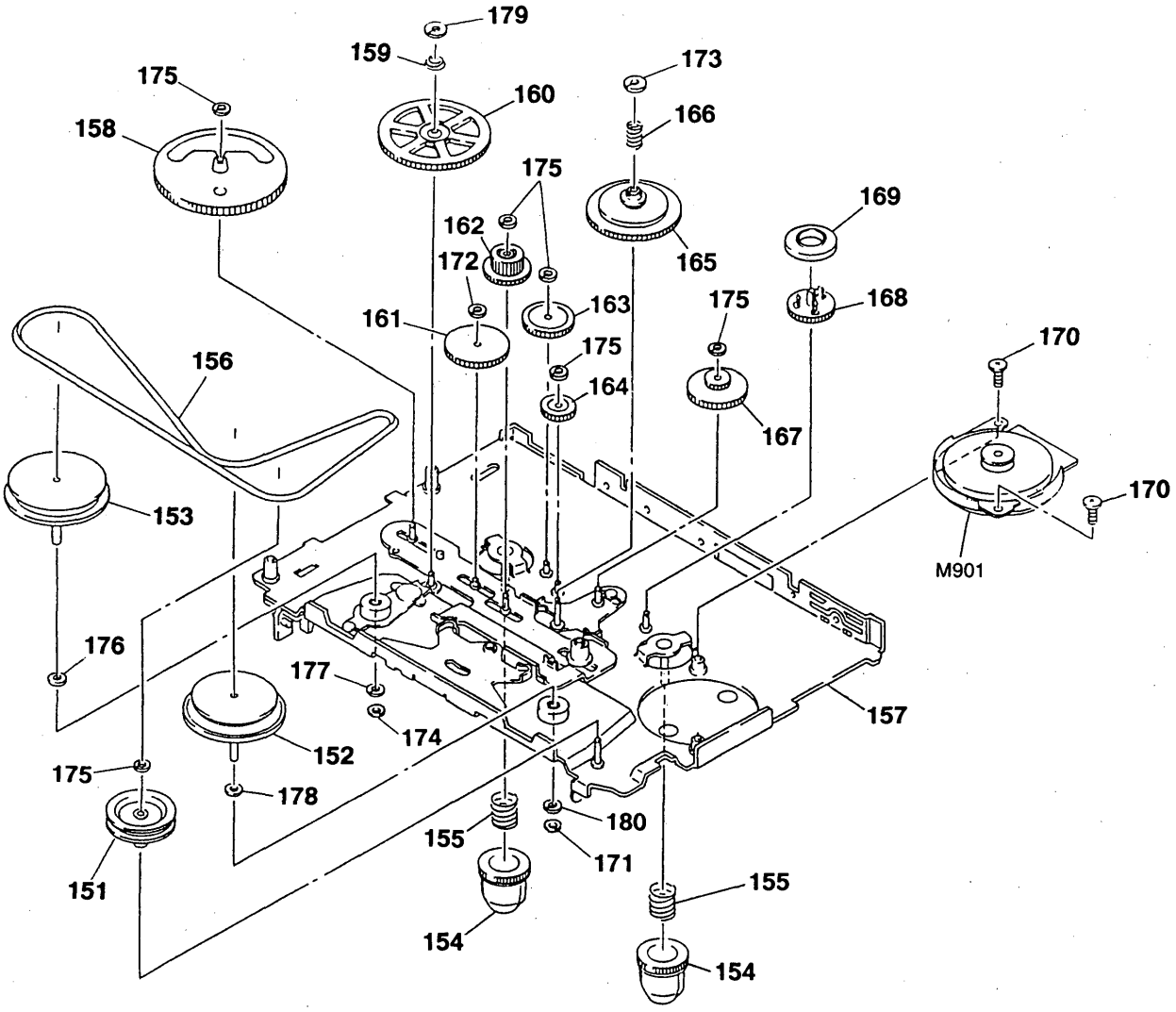
6-3. MECHANISM SECTION 1 (MT-WMEX911-60)



Ref. No.	Part No.	Description	Remark
101	X-3369-377-1	BRACKET ASSY	
102	3-918-901-01	KNOB (D/M)	
* 103	3-918-900-11	COVER, MD (JE)	
* 103	3-918-900-31	COVER, MD (E, AUS)	
104	3-918-850-01	SPRING (CASSETTE) (CF)	
105	3-918-782-01	GUIDE (BK), HOLDER	
106	3-920-150-01	BRACKET (L) (JE)	
106	3-922-843-01	BRACKET (L) (E, AUS)	
107	X-3369-347-1	HOLDER (K) ASSY	
108	X-3369-379-1	ARM ASSY, CLICK	
109	3-386-683-01	SPRING (H)	
110	7-627-553-17	PRECISION SCREW +P 2X2 TYPE 3	
111	X-3366-298-1	PINCH LEVER (N) ASSY	
112	3-386-684-11	SPRING (PINCH N)	

Ref. No.	Part No.	Description	Remark
* 113	3-386-646-01	LEVER, HEAD	
114	3-704-413-31	SCREW (M1.4X7.2)	
115	X-3366-296-1	PINCH LEVER (R) ASSY	
116	3-386-685-11	SPRING (PINCH R)	
117	3-366-892-01	SCREW (M1.4)	
118	3-704-197-21	SCREW (M1.4X2.5), LOCKING	
119	3-907-009-41	SCREW (M1.4)	
120	3-907-859-01	SPACER (H)	
* 121	X-3369-364-1	BRACKET (CASSETTE) ASSY	
122	3-918-901-11	KNOB (D/M)	
123	3-923-717-01	WASHER	
HP901	1-500-091-11	HEAD, MAGNETIC (PLAYBACK)	

6-4. MECHANISM SECTION 2 (MT-WMEX911-60)



Ref. No.	Part No.	Description	Remark
151	3-386-711-11	PULLEY (REVERSE)	
152	X-3368-639-1	WHEEL (RS) ASSY, CAPSTAN	
153	X-3369-346-1	WHEEL (NSK) ASSY, CAPSTAN	
154	3-912-169-01	GEAR (REEL)	
155	3-913-727-01	SPRING (BT), COMPRESSION	
156	3-919-884-01	BELT	
157	X-3369-345-1	CHASSIS ASSY	
158	3-912-173-01	GEAR (CAM)	
159	3-912-170-01	SPRING (FR), COMPRESSION	
160	3-919-886-01	GEAR (FR)	
161	3-918-783-01	GEAR (AK)	
162	3-918-785-01	GEAR (BK)	
163	3-912-175-01	GEAR (G)	
164	3-912-168-01	GEAR (E)	
165	X-3369-344-1	CLUTCH ASSY (K)	
166	3-913-620-01	SPRING (UD), COMPRESSION	

Ref. No.	Part No.	Description	Remark
167	3-918-784-01	GEAR (DK)	
168	3-912-176-01	GEAR (F)	
169	3-912-172-01	MAGNET	
170	3-704-197-11	SCREW (M1.4X2.0), LOCKING	
171	3-325-394-01	WASHER, STOPPER	
172	3-348-953-01	WASHER	
173	3-348-953-11	WASHER	
174	3-348-993-01	WASHER	
175	3-349-859-01	WASHER	
176	3-350-945-11	WASHER	
177	3-350-989-01	WASHER	
178	3-386-694-01	WASHER	
179	3-906-183-01	WASHER	
180	3-919-885-01	WASHER	
M901	1-698-463-11	MOTOR	

AUDIO

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: μ , for example:
  uA...: μA..., uPA...: μPA..., uPB...: μPB..., uPC...: μPC..., uPD...: μPD...
- CAPACITORS
  uF : μF
- COILS
  uH : μH
- Abbreviation
  AUS : Australian model
  JE : Tourist model

Ref. No.	Part No.	Description			Remark
	A-3016-628-A	AUDIO BOARD, COMPLETE (JE)			
		**********			
	A-3016-714-A	AUDIO BOARD, COMPLETE (E, AUS)			
		**********			
	1-537-585-11	CONDUCTIVE BOARD, CONNECTION			
	3-841-069-02	SPACER			
*	3-918-865-01	HOLDER, LCD			
		< CAPACITOR >			
C101	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C102	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C103	1-107-815-11	TANTAL. CHIP	2.2uF	20%	4V
C104	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C105	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C106	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C107	1-164-174-11	CERAMIC CHIP	0.0082uF	10%	25V
C108	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C109	1-165-112-11	CERAMIC CHIP	0.33uF		16V
C110	1-109-847-11	TANTAL. CHIP	0.47uF	10%	16V
C111	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C112	1-135-170-21	TANTALUM CHIP	6.8uF	20%	4V
C113	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C114	1-165-112-11	CERAMIC CHIP	0.33uF		16V
C115	1-164-346-11	CERAMIC CHIP	1uF		16V
C117	1-109-930-11	TANTAL. CHIP	220uF	20%	2.5V
C118	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C119	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C201	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C202	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C203	1-107-815-11	TANTAL. CHIP	2.2uF	20%	4V
C204	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C205	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C206	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C207	1-164-174-11	CERAMIC CHIP	0.0082uF	10%	25V
C208	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C209	1-165-112-11	CERAMIC CHIP	0.33uF		16V
C210	1-109-847-11	TANTAL. CHIP	0.47uF	10%	16V
C211	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C212	1-135-170-21	TANTALUM CHIP	6.8uF	20%	4V
C213	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C214	1-165-112-11	CERAMIC CHIP	0.33uF		16V
C215	1-164-346-11	CERAMIC CHIP	1uF		16V
C217	1-109-930-11	TANTAL. CHIP	220uF	20%	2.5V
C218	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C219	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C301	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C302	1-165-112-11	CERAMIC CHIP	0.33uF		16V
C303	1-135-151-21	TANTALUM CHIP	4.7uF	20%	4V
C304	1-135-316-11	TANTAL. CHIP	22uF	20%	2.5V
C305	1-135-151-21	TANTALUM CHIP	4.7uF	20%	4V
C306	1-135-316-11	TANTAL. CHIP	22uF	20%	2.5V
C307	1-135-337-11	TANTAL. CHIP	1uF	10%	6.3V
C308	1-135-337-11	TANTAL. CHIP	1uF	10%	6.3V
C311	1-135-201-11	TANTALUM CHIP	10uF	20%	4V
C312	1-109-847-11	TANTAL. CHIP	0.47uF	10%	16V
C313	1-164-346-11	CERAMIC CHIP	1uF		16V
C314	1-164-346-11	CERAMIC CHIP	1uF		16V
C315	1-109-847-11	TANTAL. CHIP	0.47uF	10%	16V
C316	1-135-151-21	TANTALUM CHIP	4.7uF	20%	4V
C317	1-165-112-11	CERAMIC CHIP	0.33uF		16V
C318	1-107-815-11	TANTAL. CHIP	2.2uF	10%	4V
C319	1-135-316-11	TANTAL. CHIP	22uF	20%	2.5V
C321	1-109-996-11	CERAMIC CHIP	1uF		6.3V
C323	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C324	1-135-219-11	TANTAL. CHIP	15uF	20%	2.5V
C325	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C326	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C501	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C502	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C503	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C504	1-162-912-11	CERAMIC CHIP	7PF	0.5PF	50V
C505	1-164-237-11	CERAMIC CHIP	16PF	5%	50V
C506	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C507	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C508	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C509	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C510	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C511	1-162-941-11	CERAMIC CHIP	10PF	0.5PF	50V
C512	1-162-908-11	CERAMIC CHIP	3PF	0.25PF	50V (E, AUS)
C512	1-162-936-11	CERAMIC CHIP	5PF	0.25PF	50V (JE)
C513	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C514	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C515	1-135-253-11	TANTAL. CHIP	33uF	20%	4V
C516	1-162-941-11	CERAMIC CHIP	10PF	0.5PF	50V

Ref. No.	Part No.	Description			Remark
C517	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C518	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C519	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C601	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C602	1-164-344-11	CERAMIC CHIP	0.068uF	10%	25V
C603	1-164-344-11	CERAMIC CHIP	0.068uF	10%	25V
C604	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C605	1-107-682-11	CERAMIC CHIP	1uF	10%	16V
C606	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C607	1-135-192-21	TANTAL. CHIP	0.47uF	10%	20V
C701	1-164-346-11	CERAMIC CHIP	1uF		16V
C702	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C703	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C704	1-135-170-21	TANTALUM CHIP	6.8uF	20%	4V
C705	1-162-943-11	CERAMIC CHIP	15PF	5%	50V
C706	1-107-815-11	TANTAL. CHIP	2.2uF	20%	4V
C707	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C708	1-135-337-11	TANTAL. CHIP	1uF	10%	6.3V
C709	1-107-815-11	TANTAL. CHIP	2.2uF	20%	4V
		< CONNECTOR >			
CN301	1-695-942-21	CONNECTOR, FPC (ZIF) 6P			
CN501	1-766-908-11	HOUSING, CONNECTOR 18P			
		< DIODE >			
D301	8-719-420-51	DIODE	MA729		
D501	8-719-049-09	DIODE	1SS367-T3SONY		
D502	8-719-051-01	DIODE	CL-170HR-CD-T (BATT)		
D503	8-719-049-09	DIODE	1SS367-T3SONY		
D701	8-719-049-09	DIODE	1SS367-T3SONY		
D702	8-719-420-51	DIODE	MA729		
D703	8-719-404-46	DIODE	MA110		
D703	8-719-988-62	DIODE	1SS355TE-17		
		< FERRITE BEAD >			
FB501	1-414-385-11	INDUCTOR, FERRITE BEAD			
FB502	1-414-385-11	INDUCTOR, FERRITE BEAD			
FB503	1-414-385-11	INDUCTOR, FERRITE BEAD			
FB504	1-414-385-11	INDUCTOR, FERRITE BEAD			
FB505	1-414-385-11	INDUCTOR, FERRITE BEAD			
		< HALL ELEMENT >			
H701	8-719-042-61	ELEMENT, HALL HW-108AFT-DE			
		< HEAD >			
HP901	1-500-091-11	HEAD, MAGNETIC (PLAYBACK)			
		< IC >			
IC301	8-759-295-97	IC	TA2084F		
IC501	8-759-329-93	IC	uPD1724GB-688-1A7		
IC502	8-759-449-36	IC	S-29L221-S		
IC503	8-759-249-34	IC	S-80719SN-DG		
IC601	8-759-996-13	IC	TLP326ADB		
IC701	8-759-335-00	IC	MSM6576-60GS-K		
IC702	8-759-190-80	IC	S-81211PG-PA-T1		
		< JACK >			
J301	1-766-512-21	JACK 7P (REMOTE ∩)			
		< JUMPER RESISTOR >			
JC301	1-216-864-11	METAL CHIP	0	5%	1/16W
JC303	1-216-864-11	METAL CHIP	0	5%	1/16W
		< COIL >			
L501	1-412-991-11	INDUCTOR	10uH		
L502	1-412-965-11	INDUCTOR	68N		
		< FLUORECENT INDICATOR >			
ND501	1-810-702-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< TRANSISTOR >			
Q301	8-729-230-72	TRANSISTOR	2SA1362YG		
Q302	8-729-420-44	TRANSISTOR	UN5210		
Q303	8-729-422-39	TRANSISTOR	XN4404		
Q304	8-729-400-56	TRANSISTOR	2SD1328-T		
Q305	8-729-024-43	TRANSISTOR	2SA1365-T12-1EF		
Q306	8-729-602-21	TRANSISTOR	2SC4154-F		
Q501	8-729-402-16	TRANSISTOR	XN4608		
Q502	8-729-230-72	TRANSISTOR	2SA1362YG		
Q503	8-729-422-18	TRANSISTOR	XN4315		
Q504	8-729-403-24	TRANSISTOR	XN4210		
Q505	8-729-117-72	TRANSISTOR	2SC4178-F13		
Q506	8-729-117-72	TRANSISTOR	2SC4178-F13		
Q507	8-729-022-66	TRANSISTOR	XN1210-TX		
Q508	8-729-420-44	TRANSISTOR	UN5210		
Q509	8-729-420-44	TRANSISTOR	UN5210		
Q510	8-729-422-51	TRANSISTOR	UN5110-QRS		
Q511	8-729-420-50	TRANSISTOR	UN5215		
Q512	8-729-420-44	TRANSISTOR	UN5210		
Q601	8-729-230-72	TRANSISTOR	2SA1362YG		
Q602	8-729-230-72	TRANSISTOR	2SA1362YG		
Q603	8-729-230-72	TRANSISTOR	2SA1362YG		
Q604	8-729-421-29	TRANSISTOR	UN5216R		
Q605	8-729-402-16	TRANSISTOR	XN4608		
Q701	8-729-602-21	TRANSISTOR	2SC4154-F		
Q702	8-729-420-44	TRANSISTOR	UN5210		
Q703	8-729-422-51	TRANSISTOR	UN5110-QRS		
Q704	8-729-422-51	TRANSISTOR	UN5110-QRS		
Q705	8-729-022-66	TRANSISTOR	XN1210-TX		

Ref. No.	Part No.	Description				Remark
Q706	8-729-420-44	TRANSISTOR	UN5210			
Q707	8-729-420-44	TRANSISTOR	UN5210			
Q708	8-729-420-44	TRANSISTOR	UN5210			
Q709	8-729-403-07	TRANSISTOR	XN1213			
Q709	8-729-904-07	TRANSISTOR	FMG2			
Q710	8-729-030-54	TRANSISTOR	MSB1218A-RT1			
Q710	8-729-230-60	TRANSISTOR	2SA1586-YG			
		< RESISTOR >				
R103	1-216-839-11	METAL CHIP	33K	5%	1/16W	
R104	1-216-812-11	METAL CHIP	180	5%	1/16W	
R105	1-216-830-11	METAL CHIP	5.6K	5%	1/16W	
R106	1-216-847-11	METAL CHIP	150K	5%	1/16W	
R107	1-216-839-11	METAL CHIP	33K	5%	1/16W	
R108	1-216-839-11	METAL CHIP	33K	5%	1/16W	
R109	1-216-834-11	METAL CHIP	12K	5%	1/16W	
R110	1-216-852-11	METAL CHIP	390K	5%	1/16W	
R111	1-216-824-11	METAL CHIP	1.8K	5%	1/16W	
R112	1-218-294-11	METAL GLAZE	30K	5%	1/16W	
R113	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	
R114	1-216-824-11	METAL CHIP	1.8K	5%	1/16W	
R115	1-218-270-11	METAL GLAZE	1.1K	5%	1/16W	
R116	1-216-822-11	METAL CHIP	1.2K	5%	1/16W	
R117	1-216-793-11	METAL GLAZE	4.7	5%	1/16W	
R203	1-216-839-11	METAL CHIP	33K	5%	1/16W	
R204	1-216-812-11	METAL CHIP	180	5%	1/16W	
R205	1-216-830-11	METAL CHIP	5.6K	5%	1/16W	
R206	1-216-847-11	METAL CHIP	150K	5%	1/16W	
R207	1-216-839-11	METAL CHIP	33K	5%	1/16W	
R208	1-216-839-11	METAL CHIP	33K	5%	1/16W	
R209	1-216-834-11	METAL CHIP	12K	5%	1/16W	
R210	1-216-852-11	METAL CHIP	390K	5%	1/16W	
R211	1-216-824-11	METAL CHIP	1.8K	5%	1/16W	
R212	1-218-294-11	METAL GLAZE	30K	5%	1/16W	
R213	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	
R214	1-216-824-11	METAL CHIP	1.8K	5%	1/16W	
R215	1-218-270-11	METAL GLAZE	1.1K	5%	1/16W	
R216	1-216-822-11	METAL CHIP	1.2K	5%	1/16W	
R217	1-216-793-11	METAL GLAZE	4.7	5%	1/16W	
R301	1-218-736-11	METAL CHIP	68K	0.50%	1/16W	
R302	1-218-732-11	METAL CHIP	47K	0.50%	1/16W	
R303	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R304	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	
R305	1-216-840-11	METAL CHIP	39K	5%	1/16W	
R306	1-216-809-11	METAL CHIP	100	5%	1/16W	
R307	1-216-809-11	METAL CHIP	100	5%	1/16W	
R308	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	
R309	1-216-821-11	METAL CHIP	1K	5%	1/16W	
R311	1-216-827-11	METAL CHIP	3.3K	5%	1/16W	
R313	1-216-845-11	METAL CHIP	100K	5%	1/16W	

Ref. No.	Part No.	Description				Remark
R314	1-216-793-11	METAL GLAZE	4.7	5%	1/16W	
R315	1-216-809-11	METAL CHIP	100	5%	1/16W	
R316	1-216-849-11	METAL CHIP	220K	5%	1/16W	
R317	1-216-827-11	METAL CHIP	3.3K	5%	1/16W	
R318	1-216-831-11	METAL CHIP	6.8K	5%	1/16W	
R319	1-216-849-11	METAL CHIP	220K	5%	1/16W	
R501	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R502	1-216-849-11	METAL CHIP	220K	5%	1/16W	
R503	1-216-841-11	METAL CHIP	47K	5%	1/16W	
R504	1-216-821-11	METAL CHIP	1K	5%	1/16W	
R505	1-216-821-11	METAL CHIP	1K	5%	1/16W	
R506	1-216-821-11	METAL CHIP	1K	5%	1/16W	
R507	1-216-821-11	METAL CHIP	1K	5%	1/16W	
R508	1-216-821-11	METAL CHIP	1K	5%	1/16W	
R509	1-216-849-11	METAL CHIP	220K	5%	1/16W	
R510	1-216-839-11	METAL CHIP	33K	5%	1/16W	
R511	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	
R512	1-216-849-11	METAL CHIP	220K	5%	1/16W	
R513	1-216-821-11	METAL CHIP	1K	5%	1/16W	
R514	1-216-821-11	METAL CHIP	1K	5%	1/16W	
R515	1-216-830-11	METAL CHIP	5.6K	5%	1/16W	
R516	1-216-841-11	METAL CHIP	47K	5%	1/16W	
R517	1-216-823-11	METAL CHIP	1.5K	5%	1/16W	
R518	1-216-809-11	METAL CHIP	100	5%	1/16W	
R519	1-216-809-11	METAL CHIP	100	5%	1/16W	
R520	1-216-836-11	METAL CHIP	18K	5%	1/16W	
R521	1-218-484-11	METAL GLAZE	750	5%	1/16W	
R522	1-216-841-11	METAL CHIP	47K	5%	1/16W	
R523	1-216-841-11	METAL CHIP	47K	5%	1/16W	
R524	1-216-841-11	METAL CHIP	47K	5%	1/16W	
R526	1-216-809-11	METAL CHIP	100	5%	1/16W	
R527	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R528	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R529	1-218-845-11	METAL CHIP	820	0.50%	1/16W	
R530	1-218-692-11	METAL CHIP	1K	0.50%	1/16W	
R531	1-218-694-11	METAL CHIP	1.2K	0.50%	1/16W	
R532	1-218-851-11	METAL CHIP	1.5K	0.50%	1/16W	
R533	1-218-707-11	METAL CHIP	4.3K	0.50%	1/16W	
R534	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R535	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R601	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R602	1-216-835-11	METAL CHIP	15K	5%	1/16W	
R603	1-216-793-11	METAL GLAZE	4.7	5%	1/16W	
R604	1-216-807-11	METAL CHIP	68	5%	1/16W	
R605	1-216-807-11	METAL CHIP	68	5%	1/16W	
R606	1-216-807-11	METAL CHIP	68	5%	1/16W	
R607	1-216-831-11	METAL CHIP	6.8K	5%	1/16W	
R608	1-216-833-11	METAL CHIP	10K	5%	1/16W	
R609	1-216-839-11	METAL CHIP	33K	5%	1/16W	
R610	1-216-833-11	METAL CHIP	10K	5%	1/16W	

Ref. No.	Part No.	Description				Remark
R611	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R701	1-216-839-11	METAL CHIP	33K	5%	1/16W	
R702	1-216-839-11	METAL CHIP	33K	5%	1/16W	
R703	1-218-870-11	METAL CHIP	9.1K	0.50%	1/16W	
R704	1-218-618-11	METAL CHIP	22	5%		
R705	1-216-849-11	METAL CHIP	220K	5%	1/16W	
R706	1-216-851-11	METAL CHIP	330K	5%	1/16W	
R707	1-216-833-11	METAL CHIP	10K	5%	1/16W	
R708	1-216-815-11	METAL CHIP	330	5%	1/16W	
R709	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R710	1-216-849-11	METAL CHIP	220K	5%	1/16W	
R711	1-216-839-11	METAL CHIP	33K	5%	1/16W	
R712	1-216-837-11	METAL CHIP	22K	5%	1/16W	
R713	1-218-292-11	METAL GLAZE	20K	5%	1/16W	
R714	1-216-849-11	METAL CHIP	220K	5%	1/16W	
R715	1-216-857-11	METAL CHIP	1M	5%	1/16W	
		< VARIABLE RESISTOR >				
RV301	1-223-775-11	RES, VAR, CARBON 10K/10K (VOL)				
RV601	1-223-229-21	RES, ADJ, METAL GLAZE 4.7K				
		< SWITCH >				
S301	1-572-922-11	SWITCH, SLIDE (FM MODE, DOLBY NR)				
S501	1-692-088-51	SWITHC, TACTILE (ENTER)				
S502	1-762-189-11	SWITCH, SLIDE (TUNING)				
S503	1-762-230-11	SWITCH, KEYBOARD (■•RADIO OFF)				
S504	1-762-230-11	SWITCH, KEYBOARD (◀ ▶)				
S505	1-762-230-11	SWITCH, KEYBOARD (FF, +)				
S506	1-762-230-11	SWITCH, KEYBOARD (REW, -)				
S507	1-762-230-11	SWITCH, KEYBOARD (BAND, RADIO ON)				
S508	1-762-230-11	SWITCH, KEYBOARD (ASP)				
S701	1-692-370-11	SWITCH, SLIDE (MD MODE)				
S702	1-572-922-11	SWITCH, SLIDE (MODE, BL SKIP)				
S703	1-762-188-11	SWITCH, PUSH (1 KEY)(A/B SIDE)				
S901	1-762-187-11	SWITCH, LEAF (TAPE/ATS)				
		< VIBRATOR >				
X501	1-579-615-11	VIBRATOR, CRYSTAL (75kHz)				
X701	1-579-616-11	VIBRATOR, CRYSTAL (32.768kHz)				
**********						
*	1-656-358-11	AUDIO SUB BOARD				
		**********				
		(AUDIO BOARD SUFFIX No. 11)				
		< CAPACITOR >				
C801	1-135-337-11	TANTAL. CHIP	1uF	10%	6.3V	

Ref. No.	Part No.	Description				Remark
		< DIODE >				
D801	8-719-404-46	DIODE	MA110			
D801	8-719-988-62	DIODE	1SS355TE-17			
		< TRANSISTOR >				
Q801	8-729-403-07	TRANSISTOR	XN1213			
Q801	8-729-904-07	TRANSISTOR	FMG2			
Q802	8-729-030-54	TRANSISTOR	MSB1218A-RT1			
Q802	8-729-230-60	TRANSISTOR	2SA1586-YG			
		< RESISTOR >				
R801	1-216-857-11	METAL CHIP	1M	5%	1/16W	
R802	1-216-849-11	METAL CHIP	220K	5%	1/16W	
**********						
	1-654-436-11	MOTOR FLEXIBLE BOARD				
		**********				
		< MOTOR >				
M901	1-698-463-11	MOTOR				
**********						
	A-3016-154-A	TUNER BOARD, COMPLETE (E, AUS)				
		**********				
	A-3016-631-A	TUNER BOARD, COMPLETE (JE)				
		**********				
		< BAND PASS FILTER >				
BPF1	1-233-260-11	FILTER, BAND PASS				
		< CAPACITOR >				
C1	1-162-953-11	CERAMIC CHIP	100PF	5%	50V	(E, AUS)
C1	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V	(JE)
C2	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V	
C3	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V	
C4	1-164-238-11	CERAMIC CHIP	36PF	5%	50V	
C6	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V	
C7	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V	
C8	1-162-938-11	CERAMIC CHIP	7PF	0.5PF	50V	
C9	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V	
C10	1-162-962-11	CERAMIC CHIP	470PF	10%	50V	
C11	1-162-928-11	CERAMIC CHIP	120PF	5%	50V	
C12	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V	
C13	1-162-905-11	CERAMIC CHIP	1PF	0.25PF	50V	
C14	1-162-923-11	CERAMIC CHIP	47PF	5%	50V	
C15	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C16	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V	

TUNER

Ref. No.	Part No.	Description			Remark
C17	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C18	1-162-957-11	CERAMIC CHIP	220PF	5%	50V
C19	1-162-904-11	CERAMIC CHIP	0.5PF	0.25PF	50V
C20	1-162-926-11	CERAMIC CHIP	82PF	5%	50V
C21	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C22	1-135-316-11	TANTAL. CHIP	22uF	20%	2.5V
C23	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C24	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C25	1-162-995-11	CERAMIC CHIP	0.022uF		50V
C26	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C27	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C28	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C29	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V
C30	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C31	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C32	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C33	1-164-172-11	CERAMIC CHIP	0.0056uF	10%	25V
C34	1-164-172-11	CERAMIC CHIP	0.0056uF	10%	25V
C35	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C36	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C37	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C38	1-164-345-11	CERAMIC CHIP	0.082uF	10%	25V
C39	1-164-362-11	CERAMIC CHIP	470PF	5%	50V
C40	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C41	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C42	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C43	1-107-520-11	TANTAL. CHIP	33uF	20%	2.5V
C44	1-162-995-11	CERAMIC CHIP	0.022uF		50V
C45	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C46	1-107-983-11	TANTAL. CHIP	10uF	20%	2.5V
C47	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C48	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C49	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C50	1-162-995-11	CERAMIC CHIP	0.022uF		50V
C51	1-162-926-11	CERAMIC CHIP	82PF	5%	50V
C52	1-162-971-11	CERAMIC CHIP	0.001uF		50V
C53	1-163-139-00	CERAMIC CHIP	820PF	5%	50V
C54	1-135-333-11	TANTAL. CHIP	1uF	20%	16V
C55	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C56	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C57	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C58	1-162-568-11	CERAMIC CHIP	0.33uF	10%	16V
C59	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C60	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C61	1-164-346-11	CERAMIC CHIP	1uF		16V
C62	1-135-221-11	TANTAL. CHIP	3.3uF	20%	4V
C63	1-164-346-11	CERAMIC CHIP	1uF		16V
C64	1-162-995-11	CERAMIC CHIP	0.022uF		50V
C65	1-164-344-11	CERAMIC CHIP	0.068uF	10%	25V
C66	1-162-995-11	CERAMIC CHIP	0.022uF		50V
C67	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C68	1-164-346-11	CERAMIC CHIP	1uF		16V
C69	1-107-983-11	TANTAL. CHIP	10uF	20%	2.5V
C70	1-164-346-11	CERAMIC CHIP	1uF		16V
C71	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C72	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C73	1-162-995-11	CERAMIC CHIP	0.022uF		50V
C74	1-162-905-11	CERAMIC CHIP	1PF	0.25PF	50V
C75	1-162-907-11	CERAMIC CHIP	2PF	0.25PF	50V
C76	1-162-995-11	CERAMIC CHIP	0.022uF		50V
C77	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C78	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C79	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C80	1-164-346-11	CERAMIC CHIP	1uF		16V
C81	1-162-917-11	CERAMIC CHIP	15PF	5%	50V (E, AUS)
		< FILTER >			
CF1	1-579-974-11	FILTER, CERAMIC (10.7MHz)			
CF2	1-579-974-11	FILTER, CERAMIC (10.7MHz)			
CF3	1-579-823-21	FILTER, CERAMIC (450kHz)			
		< TRIMMER >			
CT1	1-141-327-11	CAP, VAR, TRIMMER (CHIP TYPE)			
		< DIODE >			
D1	8-719-032-80	DIODE	KV1430-TL00		
D2	8-719-032-80	DIODE	KV1430-TL00		
D3	8-719-032-80	DIODE	KV1430-TL00		
D4	8-719-032-80	DIODE	KV1430-TL00		
D5	8-719-951-05	DIODE	KV1560		
D6	8-719-977-33	DIODE	DTZ11C		
D7	8-719-938-75	DIODE	SB05-05CP		
D8	8-719-404-46	DIODE	MA110		
		< IC >			
IC1	8-759-245-96	IC	TA8182FN		
IC2	8-759-245-94	IC	TA8153FN		
		< COIL >			
L6	1-412-991-11	INDUCTOR	10uH		
L7	1-412-991-11	INDUCTOR	10uH		
L8	1-402-551-11	ANTENNA, FERRITE-ROD (MW)			
L9	1-412-064-11	INDUCTOR CHIP	100uH		
L10	1-414-398-11	INDUCTOR	10uH		
		< TRANSISTOR >			
Q2	8-729-423-52	TRANSISTOR	2SC3931-C		
Q3	8-729-421-77	TRANSISTOR	UN5210-R		
Q4	8-729-423-52	TRANSISTOR	2SC3931-C		

TUNER | TUNER FLEXIBLE

Ref. No.	Part No.	Description				Remark
Q5	8-729-423-52	TRANSISTOR	2SC3931-C			
Q6	8-729-423-52	TRANSISTOR	2SC3931-C			
Q7	8-729-423-52	TRANSISTOR	2SC3931-C			
Q8	8-729-421-77	TRANSISTOR	UN5210-R			
Q9	8-729-421-77	TRANSISTOR	UN5210-R			
Q10	8-729-402-84	TRANSISTOR	XN4601			
Q11	8-729-231-96	TRANSISTOR	2SK880GR-TE85L			
Q12	8-729-602-21	TRANSISTOR	2SC4154-F			
Q13	8-729-231-96	TRANSISTOR	2SK880GR-TE85L			
Q15	8-729-400-56	TRANSISTOR	2SD1328-T			
Q16	8-729-800-37	TRANSISTOR	2SD1048-X7			
Q17	8-729-800-73	TRANSISTOR	2SB815B7-TA			
Q18	8-729-422-51	TRANSISTOR	UN5110-QRS			
		< RESISTOR >				
R1	1-216-853-11	METAL CHIP	470K	5%	1/16W	
R2	1-216-853-11	METAL CHIP	470K	5%	1/16W	
R3	1-216-853-11	METAL CHIP	470K	5%	1/16W	
R4	1-216-853-11	METAL CHIP	470K	5%	1/16W	
R5	1-216-853-11	METAL CHIP	470K	5%	1/16W	
R6	1-216-853-11	METAL CHIP	470K	5%	1/16W	
R8	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	
R9	1-216-853-11	METAL CHIP	470K	5%	1/16W	
R10	1-216-853-11	METAL CHIP	470K	5%	1/16W	
R11	1-216-853-11	METAL CHIP	470K	5%	1/16W	
R12	1-216-841-11	METAL CHIP	47K	5%	1/16W	
R13	1-216-853-11	METAL CHIP	470K	5%	1/16W	
R14	1-216-853-11	METAL CHIP	470K	5%	1/16W	
R15	1-216-853-11	METAL CHIP	470K	5%	1/16W	
R16	1-216-833-11	METAL CHIP	10K	5%	1/16W	
R17	1-216-833-11	METAL CHIP	10K	5%	1/16W	
R18	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R19	1-216-811-11	METAL CHIP	150	5%	1/16W	
R20	1-216-833-11	METAL CHIP	10K	5%	1/16W	
R21	1-216-811-11	METAL CHIP	150	5%	1/16W	
R22	1-216-815-11	METAL CHIP	330	5%	1/16W	
R23	1-216-851-11	METAL CHIP	330K	5%	1/16W	
R24	1-216-817-11	METAL CHIP	470	5%	1/16W	
R25	1-216-827-11	METAL CHIP	3.3K	5%	1/16W	
R26	1-216-815-11	METAL CHIP	330	5%	1/16W	
R27	1-216-813-11	METAL CHIP	220	5%	1/16W	
R28	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	
R29	1-216-833-11	METAL CHIP	10K	5%	1/16W	
R30	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R31	1-216-845-11	METAL CHIP	100K	5%	1/16W	
R32	1-216-849-11	METAL CHIP	220K	5%	1/16W	
R33	1-216-830-11	METAL CHIP	5.6K	5%	1/16W	
R34	1-216-834-11	METAL CHIP	12K	5%	1/16W	
R35	1-216-824-11	METAL CHIP	1.8K	5%	1/16W	
R37	1-216-833-11	METAL CHIP	10K	5%	1/16W	
R40	1-216-841-11	METAL CHIP	47K	5%	1/16W	
R41	1-216-833-11	METAL CHIP	10K	5%	1/16W	
R42	1-216-830-11	METAL CHIP	5.6K	5%	1/16W	
R43	1-216-833-11	METAL CHIP	10K	5%	1/16W	
R44	1-216-837-11	METAL CHIP	22K	5%	1/16W	
R55	1-216-828-11	METAL CHIP	3.9K	5%	1/16W	
R57	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	
R58	1-216-817-11	METAL CHIP	470	5%	1/16W	
R59	1-216-815-11	METAL CHIP	330	5%	1/16W	
R60	1-216-805-11	METAL CHIP	47	5%	1/16W	
R61	1-216-857-11	METAL CHIP	1M	5%	1/16W	
R63	1-216-841-11	METAL CHIP	47K	5%	1/16W	
		< VARIABLE RESISTOR >				
RV1	1-241-595-11	RES, ADJ, METAL GRAZE 22K				
		< TRANSFORMER >				
T1	1-409-837-11	COIL (WITH CORE) (IF)				
T2	1-411-143-11	COIL, AM OSCILLATION				
T3	1-404-940-21	TRANSFORMER, IF				
T4	1-404-941-21	COIL (DET)				
T5	1-423-806-11	TRANSFORMER, DC-DC CONVERTER				
	1-654-437-11	TUNER FLEXIBLE BOARD				
		MISCELLANEOUS				
HP901	1-500-091-11	HEAD, MAGNETIC (PLAYBACK)				
M901	1-698-463-11	MOTOR				
S901	1-762-187-11	SWITCH, LEAF				
		ACCESSORIES & PACKING MATERIALS				
	1-467-898-11	REMOTE CONTROL UNIT				
	1-528-231-22	BATTERY, NICKEL CADMIUM (NC-6WM) (JE)				
⚠	1-528-445-11	BATTERY CHARGER (BC-8AT) (JE)				
	1-528-543-11	BATTERY, NICKEL CADMIUM (NC-6WM) (E, AUS)				
⚠	1-528-544-11	BATTERY CHARGER (BC-7DT) (E)				
⚠	1-569-007-11	ADAPTER, CONVERSION 2P (JE, E)				
	1-759-043-11	BATTERY CASE				
*	3-376-784-01	CUSHION				
*	3-382-452-11	CASE, ACCESSORY (E)				
	3-759-939-11	MANUAL, INSTRUCTION (ENGLISH, SPANISH, CHINESE) (E, AUS)				

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
	3-759-939-41	MANUAL, INSTRUCTION (JAPANESE, ENGLISH) (JE)	
	3-759-939-51	MANUAL, INSTRUCTION (KOREAN) (JE)	
	3-918-892-01	CASE, CARRYING	
	3-920-201-01	CLIP	
*	3-920-301-01	INDIVIDUAL CARTON	
	8-953-537-90	HEADPHONE MDR-E741MP//K SET	
	X-3329-657-1	ATTACHMENT	

Printing Method for Large Sized Documents Such As Circuit Diagrams

Printing the page that exceeds A4-size two pages (or letter size) is possible by specifying the print range. (Acrobat Reader Version 4.0 or later)

1. The enlarged print is made, if a smaller range than A4 size is specified and the A4 size is selected as a print paper.
2. Almost real sized print is made, if the range is specified, meeting the print paper size.
3. The reduced print is made, if a larger range than the print paper size is specified.

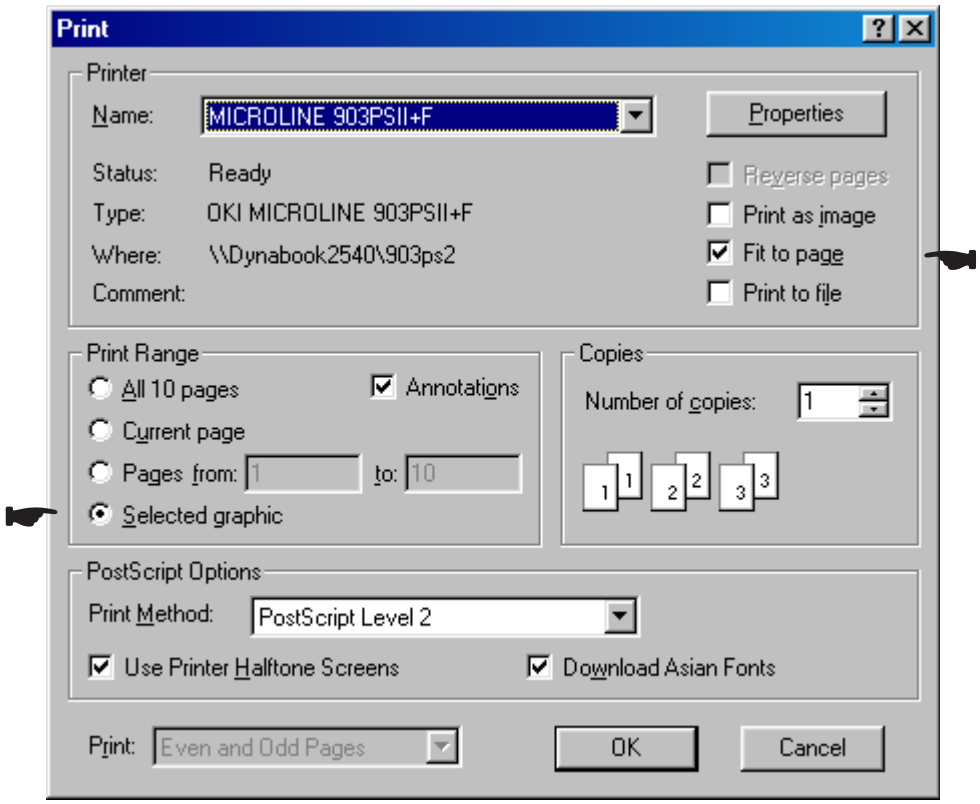
Printing by Specifying a Range

In printing out the drawings such as a schematic diagram and a printed wiring board larger than the printed paper size, they can be printed by specifying the range. (Acrobat Reader Version 4.0 or later)

1. Display the page to be printed.
2. From the File menu, select [Page Setup] and set the paper size.
3. From the Command bar, select [Graphic Select Tool].

   (Keep pressing , select)

4. Dragging the cursor, enclose the range on the page to be printed.
5. From the File menu, select [Print] and make sure that the [Selected Graphic] is already checked. Also, if [Fit to page] is checked, the selected range is enlarged or reduced (and rotated as necessary) meeting the paper size.



6. To cancel the printed range, click an arbitrary position on the screen.

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	1995.03	New
1.1	2002.01	Correction of Part No. for IC 502 (SPM-01041)